DOCUMENT RESUME

ED 192 795 IR 008 876

AUTHOR	Ford, John J., III, Ed.; Hergert, Leslie F., Ed.
TITLE	Linking Agent's Tool Kit. Part Three: The Stages of Linking Agent Intervention. Consortium Report Series.
INSTITUTION	Network of Innovative Schools, Inc., Andover, Mass.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C. Dissemination and Resources Group.
PUB DATE	79
CONTRACT	400-76-0090
NOTE	479p.; For related documents, see IR 008 874-876.
AVAILABLE FROM	The NETWORK, Inc., 290 South Main Street, Andover, MA 01810 (Parts 1, 2, and 3, $35.00/set).
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Change Agents; Consortia; Educational Change; Elementary Secondary Education; Information Sources; *Linking Agents; Program Development; *Program Implementation; *Program Improvement; Public Schools; Research Utilization; Skills

ABSTRACT

The third part of a 3-part guide developed as a resource for people involved in the selection and implementation of new programs in school settings, this examination of each phase of the linking agent's work contains articles and papers by more than 30 authors and is organized according to six stages: (1) initiating the relationship with the school improvement site, (2) defining the problem, (3) selecting a program, (4) implementing the selected program, (5) evaluating the program, and (6) disengaging from the program. (FM)

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LINKING AGENT'S TOOL KIT

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Based on developmental work
by Peter Gardner and Susan Harris

A Publication of

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THE RESEARCH & DEVELOPMENT UTILIZATION PROGRAM

Overview

In 1976 the National Institute of Education sponsored a multi-year program designed to help schools take better advantage of educational research and development. The NETWORK, Inc., working with subcontracts to

Far West Laboratory for Educational
Research and Development
San Francisco, California

KEDDS/LINK System
Wichita, Kansas

Yakima Public Schools
Yakima, Washington

Area Cooperative Educational
Services Center
New Haven, Connecticut

The Minneapolis Public Schools/
University of Minnesota
Teacher Center
Minneapolis, Minnesota

was one of seven RDU contractors. Although the seven RDU projects were chosen to represent a variety of strategies for working with schools, each project's overall approach shared the following features:

- Direct assistance to staff and community members
- Linking agents to coordinate services and work with select staff
- Team problem solving among local teachers, administrators, and others
- Access to services and resources from several sources
- Individual project documentation and research

The Consortium Project

Linking agents, housed in each of the subcontracting agencies and at The NETWORK, worked directly with the faculty and administration in thirty schools for a three year period. The linking agents followed a sequential problem solving model which resulted in groups at each school defining problems, developing criteria for reviewing potential solutions, selecting and implementing new programs, and evaluating outcomes.

Staff members in the Project's Linker Support Component provided each linker with resources, training, and consultation at regular intervals throughout the life of the project. At the same time members of the Research Component, using case studies, documented and analyzed activities at all levels of the project -- school, linking agency, interagency. The products of The Consortium were developed by one of these two components -- Linker Support or Research -- and comprise The Consortium Report Series.

(Continued on inside back cover)

The work upon which this publication is based was performed pursuant to Contract No. 400-76-0090 of the National Institute of Education. It does not, however, necessarily reflect the views of that agency.

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PREFACE TO THE CONSORTIUM REPORT SERIES

There are several indications that the R&D Utilization Program was a complex undertaking. There have been attempts to help schools become better problem solvers, thereby introducing change as an appropriate response to problematic conditions, and there have been attempts to help schools apply existing R&D. RDU, however, was an explicit attempt to introduce change in schools through group problem solving and the application of existing educational R&D.

RDU was also structurally complex. Rarely, for example, are programs developed that both fund an activity and provide the wherewithal to study it. Typically, contractors and grantees of research projects are told outright that funds are for research purposes and not for operational components of the phenomenon being studied, while service projects and demonstration programs allocate such a small portion of their budgets to evaluation (even broadly conceived) that little by way of findings is produced.

The Consortium Project not only accepted these challenges, it introduced some of its own. Its linking agencies, in addition to being geographically dispersed, were also diverse in their structures, missions, staffing, and orientation to schools. Secondly, there was a deliberate attempt to select schools in each state that reflected a demographic mix, so that we could experiment with linking agent strategies in urban, suburban, and rural settings. Furthermore, schools were selected for participation in the program based on the probability that solutions to their problems would impact on several aspects of school life. Quite obviously, both the project and the RDU program at large have been a rich source of experience for study and reflection.

It is appropriate, therefore, that at the end of such a program there be more than one publication to document the effects of its presence and to provide as many perspectives on the experience as possible. Before commenting on the volumes in the Series, however, I would like to acknowledge the work and the intense involvement of the project's linking agents and their supervisors.

Consortium linking agents were faced with the awesome tasks of not only helping schools introduce curricular improvements, but also of helping to define and implement a new role. In addition they were asked to document their activities to provide the research component of the project with baseline material for developing case studies. To Donna Bellorado, Nancy Dannenberg, Joseph DePaolo, Leslie Hergert, Carol Johnson, Linda McNeely, Lana Rahn, and Beverly Vifian goes a sincere thanks for your energy and your willingness to put yourselves under several microscopes. Thanks also for representing the project in interviews, newsletters, and various professional meetings and forums.

In addition to working with these linking agents I have been fortunate to work with several experienced educators who acted as agency supervisors and subcontract managers for the project. They include James Connett, Diane Lassman, Max McConkey, Norman Oppenheim, Harry Osgood, Ralph Parish, Margaret Robinson, and Keith Wright. On several occasions they were called upon to rise above their individual and agency priorities to act in the best interest of the project, and each time they did.

The Consortium has been characterized as an anomalous collaboration among competing agencies. From my perspective, however, the collaboration was not an anomaly; it was the product of commitment, confrontation, openness, and hard work on the parts of these linking agents and supervisors.

Three of the five volumes in the Series were produced from the Research Component of the project. They evolved from the developmental work of Dennis Collins, acting in collaboration with the research directors of the other six RDU projects. It was this early developmental work that gave shape to the linker's documentation procedures and influenced the variables ultimately reported on in the three publications.

Responsibility for the conceptualization of the school-level studies, Case Studies in Program Improvement, fell to Barry Gold who developed the framework for the studies with case writers Elliott Krause of Northeastern University; Ruth Anne Olson, a private consultant; and John Nickel, Wichita State University. Case research and preparation was also done by Alfred Wilson from Kansas State University and Mary Ladd Smith, another private consultant. The cases were designed to describe the project in its first two years at the site. At the end of the third year, epilogues of each case and a cross-case themes chapter were developed by Terrence E. Deal, Holly Gunner, and Martha Stone Wiske of the Harvard Graduate School of Education.

In editing the school-level studies, Christopher J. Drew coordinated the work of eight researchers in three states and regularly mediated conflicts between the researchers and the linkers under study. I am convinced that the cases are enlightening and the cross-case analysis compelling because of his active attention to argument and style from the early drafts to the final copy.

In preparing The "Inside" Outsiders: A Study of Three Consortium Linking Agents, Dr. Beverly Loy Taylor (Center for Policy Research, New York City) inherited a partially conceived conceptual framework, a great deal of already collected data, and an incredibly tight timeline. Rather than complain, she dug in: tightened the framework, found and filled gaps in the data through interviews, observation, and extensive document analysis, and stuck to her timeline. As project director, I was pleased with her thoroughness; as a professional, I am impressed with her monograph.

Chris Drew also conducted his own research within the project. His publication, The Consortium Project: A Study of Interagency Collaboration, is a description and analysis of the project itself and is based on his observations of the project in action. His interviews of me, conducted at intervals throughout the project, I found to be thought-provoking and professionally challenging. What he was able to use as data, I was able to take as feedback, and I believe that both of us benefited from the interactions. I certainly did.

Two project central staff took responsibility for providing several types of resources to linking agents. Peter Gardner and Susan Harris planned training events, conducted meetings, circulated information, and provided ongoing contact with the linkers. Their early work, providing resources related to specific aspects of the linker's role, created the prototype Linking Agent's Tool Kit, a collection of articles and resources. John J. Ford, III and Leslie Hergert accepted the responsibility to make the Tool Kit more generic. In the process, they have considerably upgraded the original set of resources and have added important substantive comments on the linker's role.

The Reflections book is our attempt to let project staff tell their own story. In addition to the story that unfolds, the articles also demonstrate that linking agents, like any group of practitioners, can play an important role in developing and sharing understandings about their experience. The writers represented in the book deserve credit for their willingness to think about their experiences and put forth their own analyses for public consideration and scrutiny. In editing the book I was fortunate to have the benefit of the editorial skill of Joan Wilson who worked directly with the paper writers on matters of clarity and style.

The Consortium has relied on the administrative support of a number of people over its three year history including Claire Durocher, Nina Demeritt, Nancy Lund, and Zeina Azzam, who had the massive task of coordinating production of this series. In addition, we have had extensive technical support from Paula McCarron and David Pelletier of The NETWORK's Product Development Division, and from Richard Emery, a free-lance graphic artist.

I would also like to thank Thomas S. Israel of the National Institute of Education for his support throughout the life of the program and for his responsiveness and flexibility at times when our problems had no apparent solution.

One final note on the subject of contributors to the welfare of the project: in addition to the counsel and commentary of the aforementioned people, I have also had ongoing access to David P. Crandall, Executive Director of The NETWORK, who from the start of the project has made available his professional knowledge of research utilization and his experience in project management. His support has been invaluable and his influence on me over the years has been profound. I can only hope that the reports in this Series will reflect his high standards and his tireless quest to make NETWORK publications a contribution to the future, not a rationalization of the past.

For those of us who have lived with The Consortium since 1976, the Consortium Report Series will be, no doubt, the tip of the iceberg. We just couldn't get it all into print, and in truth, we didn't try. However, I believe that we've been honest with ourselves -- that we've not invented a tip of a make-believe iceberg -- and hope that there will be a great deal in these publications that others will find of use.

Richard C. Harris, Ph.D.
Project Director

INTRODUCTION

The LINKING AGENT's TOOL KIT was developed as a resource for people involved in the selection and implementation of new programs in school settings. The job of a linking agent is a complex one that requires a wide range of knowledge and skills. Linking agents can learn from the experience and research of such fields as consultation, educational change, curriculum development and educational dissemination.

This three part kit contains numerous articles about school improvement efforts as well as introductory commentary drawn from the editors' own experience as linking agents. These articles were drawn from over one hundred articles that were selected for possible inclusion in the Tool Kit. A prototype kit including all of the initially selected articles was sent for review to some fifteen professionals working as linking agents, supervisors of linking agents and in educational publishing.

Articles cover a wide range of issues related to school improvement. There are reports of relevant research, theory and craft based articles and planning instruments and checklists.

Part I - The Linking Agent: An Overview by David P. Crandall was originally published as "Training and Supporting Linking Agents" in Linking Processes in Educational Improvement, edited by Nicholas Nash and Jack Culbertson. It describes a wide range of linking agent roles and skills, and discusses training and support mechanisms for linking agents. The client organizations served by linkers are examined as well as resources which linkers can use in working with client groups. It also describes stresses inherent in the linking role and important implementation issues faced by linkers. This first part of the Tool Kit provides an excellent overview of the realities facing those playing linking roles and reflects the author's experience as a linking agent and as a manager of a linking agency.

Part II -- Selected Background Readings includes a variety of articles on such topics as consultation, educational change and linking processes. These articles are useful resources for linking agents in helping them to understand the complexity of school improvement efforts, the organizational structure of educational institutions and techniques and approaches to consulting with school personnel.

Part III - The Stages of Linking Agent Intervention contains an examination of each phase of the linking agent's work. These stages grew out of the assumptions and experiences of the editors and comments from reviewers. The editors, linking agents themselves, based the development of these stages on some specific assumptions.

- The work of the linking agent can be described sequentially even though the order of the stages may vary depending on the school setting and working style of the linking agent. Sequential stages bring order to a complex task and provide an organizing framework for an intervention;

- The linking agent's role is a proactive one. The linking agent is not only a facilitator of change but often acts as a manager in various stages in the school improvement process; and

- The nature of the linking agent's work is collaborative. School improvement efforts work best when the linking agent works collaboratively with school staff to solve problems instead of acting as an outside expert.

The stages described in the Tool Kit are: initiating the relationship; defining the problem; selecting a program; implementing the program; evaluating the program; and disengaging from the school district.

Each stage includes commentary by the editors as well as articles that provide greater understanding of the inherent issues in the stage and serve as resources to linking agents working in that stage.

The Tool Kit serves as a useful resource for such people as consultants in state educational agencies, State Facilitators in the National Diffusion Network, curriculum and program directors in local school districts, and other educational consultants.

LINKING AGENTS TOOL KIT

THE STAGES OF LINKING AGENT INTERVENTION

STAGE 1

INITIATING THE RELATIONSHIP WITH THE SCHOOL IMPROVEMENT SITE

- Selecting a school improvement site
- Assessing readiness for change
- Understanding the organization and how it works
- Identifying a working group
- Clarifying roles and expectations
- Developing a working relationship

The linking agent's early contacts lay the foundation for an effective relationship in the school district. Beginning with the selection of an appropriate school district, the linking agent evaluates the district's readiness for change and develops a sound understanding of the working structure of the district. Moreover, the linking agent must be able to set up an effective working group to be responsible for the school improvement effort.

Selecting the school improvement site

The selection of a school or school district is often the initial task of the linking agent. If the linking agent is working for an agency outside of a local school district, he or she may have to base a decision to engage on little personal experience; the agent who has personal knowledge of the potential schools has an advantage in making a selection. In some cases this selection is based on narrow criteria such as population or geographic location. More often, however, the standards are unstated, and the linking agent must identify criteria for selecting target school districts.

There are two general approaches in choosing districts: 1) selecting districts that have the greatest needs; or 2) choosing districts that have the greatest chances of succeeding. Although the first approach may seem the most logical, school districts with the greatest needs may have such serious and basic problems that the involvement of the linking agent in one specific program area will have little chance of causing needed changes. Such districts need substantial organizational intervention instead of assistance selecting and implementing a new program. On the other hand, school districts with high chances for success may not really need any external assistance. They may be good risks because they have already been successful in selecting and implementing other programs.

No matter what approach is used in selecting a school district, the linking agent should give careful attention to clearly defining the purpose of the intervention, to developing specific criteria for selecting school districts, and to applying these criteria systematically in selecting schools. Some criteria that linking agents might use individually or in combination to select school districts include: student scores on standardized achievement tests; the school district's rating on statewide needs assessments; available district funds for selecting and implementing new programs; appropriate district personnel for success (e.g. fulltime program coordinators); organizational status of interested district personnel (e.g. superintendent as opposed to a first year teacher); access to the district (e.g.

is it 3 or 300 miles away?). Readiness for change is another important consideration in selecting school districts.

Assessing readiness for change

If the linking agent is involved in the selection of the school or school district, readiness for change within a district is certainly an important criteria for selection. If the linking agent is not involved in selection, but is assigned to a school, readiness for change is an important factor to assess because it will greatly affect the change strategies chosen and the speed at which they are introduced.

One of the first methods for testing a school's readiness for change is to solicit and examine reactions within the school or district to the introduction of the program change. Are people excited about the change and eager to participate or do they see the change as an imposition and resent the extra work it may involve? Do they view their selection as an honor or as testimony to their ineffectiveness? This information can be collected through informal conversations or through a simple anonymous reaction survey. In addition to examining the staff's initial reaction to this change effort, it is also useful to examine attitudes in the school or district about change in general.

Motivation for change in the district is another consideration. Is there one strong advocate for change in the district -- perhaps the superintendent? Or, is the motivation coming from a group of teachers who want improvement? How are the district personnel interested in change perceived? Are they viewed as respected leaders or troublemakers? In some cases the involvement of certain people in a program change effort could assure its failure. There may be political reasons for the school's participation, or the district may be responding to outside pressures, such as legislation or community pressure. Although examining the district's reason for becoming involved in this change effort is important, the linking agent should also examine the school's or district's past experience with change efforts. Have they been involved with every innovation that comes down the road, or are they slow to get involved in new things? The school's history of change may, at least in part, be discovered before going to the site. Others in the linking agent's host agency may have worked with the school district or there may be records or reports of the district's past innovation efforts.

All of these issues -- the district's reaction to the change effort, their reasons for becoming involved, and their experience with other change efforts -- are important in assessing a school's or district's readiness for change and in planning the appropriate intervention strategies.

Understanding the organization and how it works

In selecting schools or districts and in developing effective approachs for them, the linking agent should clearly understand how the school district operates.

Schools and school districts are organizations: each has its own structure, norms, and ways of operating. It is important for the linking agent to learn as much as possible about this organization as an idiosyncratic entity. Some information is a matter of record; some, the linking agent will know because of past experience or other means; some can be asked about; and some will be observed or deduced or understood only over time.

It is important to know the organization's formal structure in terms of who reports to whom. Specialists, in particular, vary in the ways they fit into the structure. Does the building reading specialist report to the principal or to the district reading coordinator -- or to both? Are there sub-structures within buildings?

Obtaining and understanding this information helps the linking agent know who should be involved in particular tasks and who should be informed about certain activities. Lack of attention to simple reporting procedures in a district can cause staff members to turn against the change effort and precipitate its failure.

It is also important to determine which people have power and in what areas. How are decisions made? Who are opinion leaders in the school? Who has influence with teachers, with the principal? How is the principal perceived by his or her staff -- as powerful, supportive, or ineffective? These questions are often impossible to ask directly but can be discovered indirectly or in time.

There are contractual issues and school district norms to investigate -- such as teachers' availability for after-school meetings. In some schools, teachers don't stay past the required time; in others, long problem solving meetings are regular events. Other helpful information in understanding the school district includes: size of the building(s) and number of teachers and support personnel; budget figures and how and when they are prepared.

Identifying a working group

When the linking agent understands how the school district functions and its readiness for change, the next step involves identifying a core group to select and implement a new program. In some school districts this group will already exist; a special group may already be formed or there may be an on-going curriculum committee in the district.

If this group is not formed, the linking agent should work with school staff to form a group that will work together on the school improvement effort. In selecting group members, a number of factors may be considered. One consideration is expertise. Since many linking agents are generalists, content specialists add valuable knowledge and resources to the working group. Selecting group members who represent different constituencies or organizational levels is another consideration. Group members who represent different groups affected by the change (e.g., teachers and administrators from different grades or district levels; school board members, parents, students, etc.) not only provide different perspectives to the working group but also help insure widespread support for the program change once it is implemented.

Once formed, this group works collaboratively with the linking agent through each stage of the school improvement effort. The group helps identify the problem to be addressed, select a new program, and evaluate the success of the implementation of the new program. In addition to working with the linking agent, this group also connects the linking agent to other school district personnel and continues the school improvement work when the linking agent is not there. With the linking agent, group members take responsibility for coordinating the implementation of the new program and integration of the program into the ongoing life of the school district.

Clarifying roles and expectations

To work effectively with schools, the linking agent should have a clear perception about what the work involves and his or her own expectations about it -- what parts of the work are the responsibility of the linking agent, and what are the responsibilities of the principal and other school personnel? In considering the answers to these questions, the linking agent should not only reflect on his or her own perceptions but should also discuss these questions with school staff involved in the change effort.

In these discussions, the linking agent should attempt to identify how he or she is perceived by various people in the school and how closely those perceptions fit with the linking agent's own perceptions. These discussions can be helpful in learning whether people have "hidden agendas" about the work; for example, a favorite solution, or a desire to see the work fail. They also help determine how decisions will be made concerning the direction and timing of the program. If the linking agent is working with a group, does the group have decision-making power -- or, will it be making a recommendation? If the latter is the case, to whom is the recommendation made -- to the principal, to the superintendent, to the faculty, to the school board? Clarifying the decision-making process and power helps the linking agent to know what decisions can be made and to determine the duration of each step.

The linking agent may consider developing a written contract that specifies responsibilities of all involved in the school improvement effort. There are advantages and disadvantages to such a written contract -- it can serve as a reminder of agreements or as a hindrance to a less formal evolutionary process.

Developing a working relationship

At the beginning of any working relationship, a tone is set. People like each other or they don't. People sense that the experience they are beginning is a serious one or is not, that it will be exciting or tedious. People have a tendency to be cautious, skeptical, or enthusiastic.

It is part of the linking agent's responsibility to set a positive tone for this relationship. The tone should be one of work, of optimism, of helpfulness, of collaboration. In the very first meetings, the linking agent should establish norms for this relationship by being well prepared, and by keeping the meetings punctual, cordial, and on task.

While they are significant, first impressions do not determine the total nature of the relationship. Trust is a quality that only develops over time, as school personnel perceive that the intervention is working and come to expect that the linking agent will be prepared and will follow through.

The linking agent should attempt to demonstrate an active caring for the school. Many linking agents have found that performing helpful tasks, even minor ones, is a way of reaching out and indicating a willingness to be of help. Scheduling meetings at staff members' convenience or on-site may demonstrate that willingness. These, and other issues addressed in this section, are useful in helping a linking agent select a school or school district with which to work and build effective working relationships.

How Not to Make a Diagnosis: Some Pitfalls - an excerpt

Ronald G. Havelock

If you decide to undertake a diagnosis before going further in suggesting and making changes, you should be aware of some of the special problems which you can get into. Although diagnosis is an important and worthwhile step in the change process, it can be a trap for the change agent if it is not handled properly. In this section, we have identified five patterns which the change agent should be careful to avoid: They are:

1. TOO MUCH DIAGNOSIS.
2. DIAGNOSIS AS A PATTERN OF AVOIDANCE.
3. USING DIAGNOSIS FOR DESTRUCTIVE CONFRONTATION.
4. IMPOSING YOUR OWN FAVORITE DIAGNOSIS.
5. FIRE FIGHTING.

We will devote a brief paragraph to each of these points.

1. TOO MUCH DIAGNOSIS

Sometimes the change agent may get stuck on diagnosis, using up most of his time and energy just in the process of defining the problem. This is not only wasteful, but may have very negative side effects. For example, the client may begin to feel so overwhelmed by the number of problems coming to light that he cannot take constructive action. On the one hand, he may be overcome by the hopelessness of his situation and on the other he may become unduly defensive. In the preceding section we

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suggested a systematic and comprehensive approach to diagnosis, but this does not mean you must be exhaustive. On most questions, you will have to be satisfied with sketchy and partial answers; your diagnosis may not get you an "A" in survey research but that is not your purpose. The diagnosis should merely be adequate for giving you a good general picture of the client's situation.

2. DIAGNOSIS AS A PATTERN OF AVOIDANCE

Diagnostic studies can be used by a client as a way of stalling or putting off needed changes. The call for "further study" is a familiar form of brush-off. Change-minded members of the client system may therefore be understandably restless and suspicious of prolonged diagnostic activity by the change agent. The change agent should not only get to it, he should also get through it and move on to the other steps in the change process.

3. USING DIAGNOSIS FOR DESTRUCTIVE CONFRONTATION

His perception of serious defects and urgent problems may impel the change agent to speak to his client in very blunt terms. He may do this as a deliberate attempt to unfreeze the client, to shock him into awareness of his needs and the necessity of change. If you pursue such a strategy, you should realize what the consequences could be. You should, above all, have a good estimate of how much your client can take. The biggest danger is that such a confrontation will destroy the relationship which you have with your client. If the client rejects you completely because he cannot accept your drastic diagnosis, then all your labors may be lost.

Even when the change agent does not intend a confrontation he should be aware of the negative power of the information he is gathering. It may make the client feel stupid, childish, naive, or incompetent. Such self-images will not give him the motivation to change. Therefore, the form and timing of diagnostic presentations is critical. Too much bad news too suddenly is a circumstance to be avoided. As noted earlier, diagnostic analysis should include positive information as well as negative and should be cast in a constructive form which makes it amenable to solutions and encourages the belief that solutions are possible.

On the other hand, if the client can accept confrontation, he may come to respect your honesty and may be moved to work more actively with you to bring about change. The use or avoidance of a strategy of confrontation is a difficult matter to resolve;

it is a dilemma which illustrates the importance of assessing the basic strengths of your client as well as his weaknesses.

4. IMPOSING YOUR OWN FAVORITE DIAGNOSIS

It is very difficult for an expert in one particular area to be truly objective in his diagnostic approach. Most of us tend to see our own specialty as the important area. If our skills are in the area of human relations training, for example, we will be more inclined to see a client's problems as human relations problems; if our skills are in the area of systems engineering we are likely to see the client's problems mostly in terms of planning, if we are curriculum specialists we will see problems primarily in terms of course content. We all have these professional blinders and it is natural and inevitable that we do. However, the change agent specialist, even if he sees his role as that of a solution giver rather than a process helper, should be aware of his limited perspective and should consciously make an effort to avoid imposing his favorite diagnosis on the client.

5. FIRE FIGHTING

Finally, the change agent should avoid falling into the opposite trap of attending only to those problems which the client sees as immediate and important. Meaningful and lasting changes are more likely to come about if they are based on careful planning from a well-rounded and reasonably comprehensive diagnosis. Many clients, however, may not appreciate this fact initially; they may see their problems as fires that have to be put out now before anything else is done, and they may want to cast you in the role of fireman. Sometimes you may have to accept such a role briefly if only to prove that you are somebody who is useful, but it is a potential trap. In the long run, fire fighting is a waste of your energy and your client's resources, for it rarely precipitates real and lasting change.

SUMMARY

In STAGE II we have tried to spell out the major considerations that should help in formulating a diagnosis. The key points are these:

(1) Above all, make some kind of diagnosis. Try to find out what the client needs before you charge in with "solutions."

(2) Identify and list the obvious symptoms as stated or presented by the client.

(3) Look for second-level symptoms which may underlie the obvious ones.
(4) Infer underlying causes when you see patterns of symptoms but do not assume them when you lack sufficient evidence.
(5) Identify opportunities and strengths as well as problems and weaknesses.
(6) Look at your client group as a "system" and construct a diagnostic inventory from a systemic viewpoint.
(7) Work with your client to establish meaningful, obtainable, and measurable objectives.
(8) Try to get maximum participation from members of the client system in the diagnostic process.

And finally

(9) Always consider the impact of diagnostic information on your relationship with the client. Even if you must confront the client with unpleasant facts about himself, try to do it constructively, not destructively, stressing the benefits of changing rather than the horrors of his present state, and using specifics, not general and sweeping indictments.

The "Trouble Shooting" Checklist for School-Based Settings - an excerpt

Brad A. Manning

GENERAL DESCRIPTION OF THE TSC

The "Trouble Shooting" Checklists (TSC's) have been developed to assist educational change agents, faculty and administrators concerned with change, in their assessment of organizational variables predictive of an institution's potential for successfully adopting innovations. Two final forms of the TSC are now existant: the TSC for school-based settings (K - 12th grades), and the TSC for higher-educational settings (university and college level). This manual focuses on the school-based TSC, while another manual is available for the higher-educational TSC (see Manning, 1976).

The TSC is a diagnostic and predictive instrument designed to aid the user in estimating the effects of particular variables on the adoption-diffusion process. That is, the TSC provides users with a means of systematically organizing descriptive information in a predictive way. Because the TSC is broken into seven scales, a profile emerges, indicating particular strengths and weaknesses within a school (with respect to the adoption process).

Scales

The TSC consists of 100 Likert-type items which can be broken into the following seven scales:

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I. School-based staff: This scale focuses on leadership and personality styles of teachers, principals, and counselors in relation to school innovativeness. Particular considerations include interpersonal and professional interaction patterns, staff attitudes, previous working experience, and demographic characteristics of the school-based staff.

II. Communications: This scale focuses on communication variables which significantly affect a school's potential for successfully adopting an innovation. In particular, this scale is concerned with patterns of communication (both within the school and the entire school system), initiators of communication, and types and forms of communication (with respect to both formal and informal channels of communication).

III. Innovative experience: This scale focuses on the school's experience with innovations and attitudes toward innovation. Focus is on both past attempts at innovation and present plans for innovation. Particular variables which are considered are: the degree to which a school has prepared itself for the adoption of innovations; the reasons for considering adoption of innovations; the extent to which the school has realistically assessed its needs; the consultant role, the district role, and the community role in relation to both past and present plans for adopting innovations.

IV. Central administration: This scale focuses on relations between the central offices, school, and school board, and identifies attitudes of the central offices and school board toward innovation, their roles in relation to the school, and their awareness of the school's particular problems and needs.

V. School/Community relations: This scale focuses on such variables as the amount and sources of funding, the degree of interest and involvement of community groups in the school system, the socio-economic environment, and attitudes of the community towards the school.

VI. Organizational climate: This scale focuses on the work climate and organizational structure of both the school and the central district office. Some of the particular organizational variables which are considered include: how decisions are made; how goals are established; what task groups exist; how task groups function; how planning takes place; what resources are available; how resources are used; how the organizational hierarchy is defined both within the school and the school district; and, the degree of centralization within the school district.

VII. Students: This scale focuses on student behavior, attitudes and demographic characteristics. Particular considerations include: student behaviors in the classroom and the lunchroom, absenteeism, tardiness, discipline problems, minority relations, teacher/student rapport, and academic excellence.

Theoretical Framework and Origin

The "Trouble Shooting" Checklist was developed in conjunction with a project which has as its theoretical framework the Concerns-Based Adoption Model (Hall, 1974; Hall, Wallace & Dossett, 1973). In brief, the Concerns-Based Adoption Model (CBAM) focuses on an individual's Stages of Concern about and Levels of Use of an innovation. The ordering of concerns and use are postulated to be progressively more sophisticated throughout the adoption-implementation process. The relationship of the TSC to the Concerns-Based Adoption Model is based on the assumption that in order for stages of concern and levels of use to develop progressively through the adoption-implementation process, an institution must meet certain conditions and be in an appropriate state of readiness. The TSC is designed to aid in predicting and diagnosing an institution's state of readiness.

Uses and Procedures of Administration

Uses of the TSC. The TSC has several major purposes. First, the TSC intends to provide an overall norm-referenced, predictive score which estimates the likelihood of a school to successfully adopt and implement an innovation. Secondly, the TSC intends to provide a seven scale diagnostic profile which focuses on the strengths and weaknesses of a school's environment in relation to the adoption and implementation of innovations.

With the context of being both a predictive and diagnostic instrument, the TSC may be used by several population groups for several different purposes:

1. Change agents (either internal or external) may use the TSC as a predictive tool to identify schools which would

be most likely to adopt an innovation successfully. Such use of the TSC could assist a change agent or funding agency in determining whether commitments of time and money would be worthwhile in particular school settings.

2. Change agents (either internal or external) may use the TSC as a diagnostic tool to obtain information that would help in planning intervention strategies appropriate to a particular school. For example, if a school scored particularly low on one scale, a change agent could plan interventions which would strengthen the school's particular weakness (e.g., establish new communication networks, etc.).

3. Administrators and teachers interested in change may use the TSC to identify problem areas within their school. If a school is considering the adoption of a new program, members could use the TSC to self-evaluate the school and identify strengths and weakneses which would affect the adoption process.

4. Several members of a school may complete the TSC in order to identify differences in their perceptions of the school. Such evaluation could be catalytic to discussions of problem areas and differences of perception within the school.

5. Educators may use the TSC as an instructional tool to teach change agents or students interested in change, to identify key organizational variables which effect the adoption process.

6. Research organizations may use the TSC to identify highly innovative or noninnovative schools for pilot testing of new programs, in order to measure the effects of the program in varied settings.

Limitations on use. Users should keep in mind that the TSC is a new instrument. While the TSC does have reliability, some indications of validity, and norms based on a limited sample, the TSC has not been used extensively in either experimental or field studies. Therefore, the developer cautions users not to rely solely on TSC scores for decision making.

Administration of the TSC. The TSC is easily completed and hand scored (see scoring section). The respondent is simply required to respond to each descriptive statement on a 1 - 5 scale (ranging from "very typical" to "very atypical"). In addition, the respondent may use either an "NA" or "?" to indicate if an item is Not Applicable to the particular institution (NA), or if s/he does not have the necessary information (?). If a respondent uses a "?" for a response, s/he should try to obtain the needed information before scoring the instrument. Time required to complete the instrument, after an individual has familiarized him/herself with an institution, is estimated to be 20 to 30 minutes. Scoring is estimated to take 15 minutes.

Members of an organization should be able to complete most items based on their immediate knowledge of the institution. External change agents should first study the instrument in order to become completely familiar with the information required to complete the form, and then spend a few days meeting with and interviewing various members of the organization in order to obtain the necessary information. The author urges that interviews be conducted with a variety of people, both receptive and unreceptive, of varying influence in the organization, in order to obtain the most complete impression of the institution. In such interviews, students should not be neglected. They can be a valuable source of information.

Format and Scoring

Format

The TSC consists of 100 descriptive statements. These statements are randomly arranged, and can be broken into the following seven scales:

Scale I: School-Based Staff
(Items in this scale describe personality and leadership styles of principals, teachers and counselors.)

Scale II: Communication
(Items in this scale describe communication activities throughout the entire school system.)

Scale III: Innovative Experience
(Items in this scale describe a school's experience with innovations and attitudes toward innovations.)

Scale IV: Central Administration
(Items in this scale focus on relations between the central offices, school and school board.)

Scale V: School/Community Relations
(Items in this scale attempt to tap information on such

variables as the amount and sources of funding, the degree of interest and involvement of community groups in the school system, and attitudes of the community toward the school.)

Scale VI: Organizational Climate
(Items in this scale describe the work climate and organizational structure of both the school and the district.)

Scale VII: Students
(Items in this scale describe student behavior, attitudes, and demographic characteristics.)

Each item is to be rated on a five point scale ranging from "very typical" to "very atypical." A "?" may be used when one doesn't have enough information to respond to an item, and the symbol "NA" may be used when a statement is not applicable to a particular school. The instrument provides seven scale scores in addition to a total score.

Scoring

Scoring of the TSC can be done by hand and requires approximately 15 minutes. As explained in detail below, all items which describe noninnovative organizational characteristics must be reverse keyed before the scores are summed. Scores are then added for each scale and for the total instrument. Those respondents who have chosen to use the symbols "NA" and "?" should refer to the Score adjustment formula section which provides a formula for equalizing the scores of TSC's in which these symbols were used, with the scores of TSC's in which these symbols were not used.

Reverse key scoring. The item numbers listed below are reverse keyed, and should have their rating values adjusted in the following manner:

item response		reverse score value
5	=	1
4	=	2
3	=	3 (reverse keyed items rated 3 should not be changed)
2	=	4
1	=	5

For example, if you have marked one of the following items a "1," it should be changed to a "5" for scoring purposes; if you have marked one of the following items a "4," it should be changed to a "2" for scoring purposes. The following items should be reverse keyed:

1	13	25	39	46	59	78	92
2	14	28	41	48	61	81	93
4	18	30	42	49	65	82	100
8	22	32	43	55	72	85	
9	23	38	45	58	73	87	

Scales. In order to derive each scale score, add the ratings for the respective item numbers listed below (the symbols "?" and "NA" should be assigned 0 score values):

Scale I:	5	41	68	85
	33	59	73	
	35	66	78	
	37	67	80	
Scale II:	7	24	60	87
	16	29	75	91
	19	53	76	98
	20	56	82	
Scale III:	3	25	47	64
	11	32	50	79
	17	42	58	84
	23	45	62	100
Scale IV:	4	22	61	96
	9	30	81	97
	14	36	89	
	21	43	90	
Scale V:	1	27	40	93
	12	31	44	
	13	34	52	
	26	39	70	
Scale VI:	6	38	55	86
	8	46	63	92
	10	48	72	99
	18	51	74	

Scale VII:	2	54	71	94
	15	57	77	95
	28	65	83	
	49	69	88	

Deriving total score. After the item ratings have been changed as described above, add up all ratings to the left of items for the total score.

Score adjustment formula. If you have chosen to use the symbols "?" or "NA," it is necessary to use the following score adjustment formula. The score adjustment formula equalizes the scores to TSC's in which these symbols have been used with the scores of TSC's in which these symbols have not been used. This formula assumes that the items receiving a numerical response are representative of the entire scale content. All items rated "NA" or "?" receive a 0 score value in this formula.

$$\frac{\text{Actual computed score for scale}}{\text{Number of items not marked with a "?" or "NA" on scale}} \quad \text{X} \quad \text{Number of items in scale}$$

For example, in order to score Scale I, first reverse key items as explained above. After reverse keying the items, add up the total score (giving "?" and "NA" a score value of 0). If an individual has three "?'s," two "NA's," four "1's," two "2's," and two "3's," the formula would be completed as follows:

Similarly, the score adjustment formula for the total score is as follows:

$$\frac{\text{Actual computed score for entire TSC}}{\text{number of items not marked with a "?" or "NA" on entire TSC}} \quad \text{X} \quad \text{Number of items in TSC}$$

For example, if an individual rates an institution using five "?'s," five "NA's," ten "1's," ten "2's," forty "3's," twenty "4's," and ten "5's" the formula would be completed as follows (after reverse keying the items):

$$\frac{280}{90} \quad X \quad 100 = 311.11$$

Subjective Rating Sheet

Please assign a rating of 1 - 4 for each of the following categories, with respect to the school's potential for adopting innovations:

4 = excellent potential for innovation
3 = good potential for innovation
2 = limited potential for innovation
1 = virtually no potential for innovation

_____ 1. Overall rating of school.

_____ 2. School-based staff. This category focuses on leadership and personality styles of teachers, principals, and counselors in relation to school innovativeness. Particular considerations should include interpersonal and professional interaction patterns, staff attitudes, previous working experience, and demographic characteristics of the school-based staff.

_____ 3. Communications. This category focuses on communication variables which significantly affect a school's potential for successfully adopting an innovation. In particular, this category is concerned with patterns of communication (both within the school and the entire school system), initiators of communication, and types and forms of communication (with respect to both formal and informal channels of communications).

_____ 4. Innovative experience: This category focuses on the school's experience with innovations and attitudes toward innovation. Focus is on both past attempts at innovation and present plans for innovation. Particular variables which should be considered are: the degree to which a school has prepared itself for the adoption of innovations; the reasons for considering adoption of innovations; the extent to which the school has realistically assessed its needs; and the consultant role, the district role, and the community role in relation to both past and present plans for adopting innovations.

_____ 5. Central administration: This category focuses on relations between the central offices, school, and school board, and identifies attitudes of the central offices and school board toward innovation, their roles in relation to the school, and their awareness of the school's particular problems and needs.

_____ 6. School/community relations: This category focuses on such variables as the amount and courses of funding, the degree of interest and involvement of community groups in the school system. the socio-economic environment, and attitudes of the community towards the school.

_____ 7. Organizational climate: This category focuses on the work climate and organizational structure of both the school and the central district office. Some of the particular organizational variables which should be considered include: how decisions are made; how goals are established; what task groups exist; how task groups function; how planning takes place; what resources are available; how resources are used; how the organizational hierarchy is defined both within the school and the school district; and, the degree of centralization within the school district.

_____ 8. Students: This category focuses on student behavior, attitudes, and demographic characteristics. Particular considerations should include: student behaviors in the classroom and the lunchroom; absenteeism; tardiness; discipline problems; minority relations; teacher/student rapport; and academic excellence.

The "Trouble Shooting" Checklist (TSC) For School-Based Settings

Introduction and Instructions

The TSC consists of 100 Likert-type items describing school characteristics. These 100 items are randomly arranged and can be broken into seven scales focusing on particular organizational variables which affect the adoption-diffusion process. The history of the development of the instrument is included in the manual, as well as information on uses of the TSC, scale titles, numbers of times in each scale, and scoring instructions.

The respondent is asked to rate whether or not an item is descriptive (typical/atypical) of a particular school. Although there are descriptive statements about individuals outside of the school (such as the superintendent), the statements, nevertheless, focus on such a person in relation to the school. The school being rated should always be the point of reference.

The term change agent is used throughout the instrument. This term is used broadly, and includes both external change agents (individuals brought in from outside of the school system for the purpose of facilitating change), and internal change agents (permanent members of the organization who are responsible for facilitating change). The role of the change agent may range from assisting a school in problem-solving by giving of their own professional expertise, to providing contacts with all available resources, to actually taking part in decisions to adopt innovations and aiding in the implementation of adopted innovations. It is also assumed that the school you are rating is at least considering the adoption of one or more innovations (as reflected in items referring to "innovations"). Finally, the term curriculum specialist refers to any person who is responsible for the planning and development of the curriculum. This person could be a permanent member of a school, or may be available through the central district offices for all schools in a district. Such a person may not be titled "curriculum specialist," however. The TSC should be completed in terms of the person who fulfills the role of curriculum specialist. If no one fulfills this role, simply mark "NA" (Not Applicable) in blanks next to items referring to curriculum specialists.

In order to complete the instrument, merely rate on a 1 - 5 scale (as indicated below), how closely each item describes the department you are rating, and record your ratings on the line directly to the left of the item.

24.

5 = very typical
4 = somewhat typical
3 = neither typical nor atypical
2 = somewhat atypcial
1 = very atypical

In addition, you may use one of the following two ratings:

1. if the item is applicable to the school you are rating, but you do not know the information, use the symbol "?."

2. if the item is not applicable to the particular school you are rating, use the symbol "NA."

(The Checklist itself follows.)

The "Trouble Shooting" Checklist (TSC) for School-Based Settings

Please rate on a 1 - 5 scale (as indicated below) how closely each item describes the school you are rating, or use one of the alternative symbols:

5 = very typical
4 = somewhat typical
3 = neither typical nor atypical
2 = somewhat atypical
1 = very atypical
NA = not applicable
? = no information at this time

_____ 1. There is much concern from the state legislature over how the innovation will affect the curriculum.

_____ 2. There are many discipline problems at this school.

_____ 3. This school is considering innovations that contain easily alterable materials which can meet the demands of varied teaching situations.

_____ 4. The central offices wait until there is a public outcry before they inform the school board of problems in the schools.

_____ 5. Non-supporters of innovation work on committees and/or travel to school with supporters of innovation.

_____ 6. The board members are highly concerned about faculty-administrative-board relations.

Please rate on a 1 - 5 scale (as indicated below) how closely each item describes the school you are rating, or use one of the alternative symbols:

5 = very typical
4 = somewhat typical
3 = neither typical nor atypical
2 = somewhat atypical
1 = very atypical
NA = not applicable
? = no information at this time

_____ 7. Direct, two-way communication occurs between administrative staff and the teaching staff.

_____ 8. The school district has an intricate bureaucratic system.

_____ 9. The school places blame on the central office for most of its problems.

_____ 10. Reasons for change are understood by members of this school.

_____ 11. Analyses have been made concerning the effects of innovations on the entire school.

_____ 12. It is part of the principal's job to maintain good relations with the community.

_____ 13. The parents infrequently attend school events.

_____ 14. The superintendent in this school system cannot withstand any criticism.

_____ 15. The students respect individual differences among themselves.

_____ 16. The teachers receive regular communications about what is happening in the school system at large.

_____ 17. Change agents have been invited to return more than once for information on educational change processes.

_____ 18. Teachers and principals do not jointly establish goals.

Please rate on a 1 - 5 scale (as indicated below) how closely each item describes the school you are rating, or use one of the alternative symbols:

5 = very typical
4 = somewhat typical
3 = neither typical nor atypical
2 = somewhat atypical
1 = very atypical
NA = not applicable
? = no information at this time

_____ 19. Board members communicate often with the superintendent.

_____ 20. The principal communicates well with the community.

_____ 21. The board of education does not actively oppose innovations.

_____ 22. The central office does not inform the school board about what is new in the field of education.

_____ 23. The teachers at this school know very little about new educational practices.

_____ 24. The principal often visits teachers' planning sessions.

_____ 25. School personnel are pressured to change by the central school district office.

_____ 26. The superintendent receives community opinion directly, rather than depending on central office staff to relay messages.

_____ 27. This school system has effective representation in community politics.

_____ 28. A large number of students at this school are receiving failing marks in their coursework.

_____ 29. The principal communicates face-to-face with teachers and/or staff, rather than by memo or phone.

_____ 30. The curriculum specialist does not have credibility with the teaching staff.

Please rate on a 1 - 5 scale (as indicated below) how closely each item describes the school you are rating, or use one of the alternative symbols:

5 = very typical
4 = somewhat typical
3 = neither typical nor atypical
2 = somewhat atypical
1 = very atypical
NA = not applicable
? = no information at this time

_____ 31. Board members believe that the community supports innovation.

_____ 32. Innovation attempts up to this time have not been carried out successfully on a day-to-day basis.

_____ 33. The principal attends meetings and conferences outside of the school district.

_____ 34. The parents are kept well-informed of school events.

_____ 35. The teachers at this school ask well-informed questions about instructional procedures.

_____ 36. There are well-informed research and evaluation personnel at the central office.

_____ 37. The teachers have developed some new classroom practices on their own.

_____ 38. The atmosphere among most teachers is more competitive than cooperative.

_____ 39. Applications for funding in this school district require specific information on procedures and/or evaluation.

_____ 40. This community has elected school board members who are interested in innovation.

_____ 41. The counselor has a poor rapport with teachers.

_____ 42. Teachers are pressured from the central offices to implement innovations quickly.

Please rate on a 1 - 5 scale (as indicated below) how closely each item describes the school you are rating, or use one of the alternative symbols:

5 = very typical
4 = somewhat typical
3 = neither typical nor atypical
2 = somewhat atypical
1 = very atypical
NA = not applicable
? = no information at this time

_____ 43. The central administrative personnel favor innovations which do not alter the system's overall structure.

_____ 44. The parents feel that they are able to give their opinions to the school administration.

_____ 45. Innovations have been imposed externally in this school system without regard to specific local needs.

_____ 46. There are no strong pressures for change outside of this particular school.

_____ 47. Members of this school have requested the opportunity to see, in operation, an innovation which is under consideration.

_____ 48. There are several isolated subsystems in this school.

_____ 49. The students are extremely rowdy in the lunch room.

_____ 50. The school plans for implementation of innovations include systematic procedures for staff education.

_____ 51. The process of decision-making is clearly defined.

_____ 52. The parents have supported educational changes in the past.

_____ 53. The curriculum specialists have systematically collected information about the needs of the school through direct contact with teachers.

_____ 54. The students feel that they are learning things which are relevant to them.

Please rate on a 1 - 5 scale (as indicated below) how closely each item describes the school you are rating, or use one of the alternative symbols:

5 = very typical
4 = somewhat typical
3 = neither typical nor atypical
2 = somewhat atypical
1 = very atypical
NA = not applicable
? = no information at this time

_____ 55. Concrete activities, necessary for carrying out educational changes, have not yet been specified.

_____ 56. The administrative staff communicates regularly with the teaching staff.

_____ 57. Although these students have their ups and downs, they are not basically frustrated.

_____ 58. This school would only be interested in making changes to avoid criticism from the school district central office.

_____ 59. There are grave weaknesses in the channels and procedures for dissemination.

_____ 60. The principal, teacher representative, or outside agent meets with small groups to determine the groups' understanding of the innovation.

_____ 61. All power lies in the central offices of the school district.

_____ 62. The superintendent involves the teaching staff, especially during the decision-making phases of the curriculum change process.

_____ 63. Teachers have access to the kinds of resources which they feel they need.

_____ 64. The person introducing the innovation has recognized authority in the school.

_____ 65. The students don't seem to be paying attention in the classroom.

30.

Please rate on a 1 - 5 scale (as indicated below) how closely each item describes the school you are rating, or use one of the alternative symbols:

5 = very typical
4 = somewhat typical
3 = neither typical nor atypical
2 = somewhat atypical
1 = very atypical
NA = not applicable
? = no information at this time

_____ 66. The teachers at this school interact outside of school hours.

_____ 67. Teachers at this school attend professional meetings outside of their school district.

_____ 68. The teachers have some peer support system established to assist each other in their teaching responsibilities.

_____ 69. The studens work well independently.

_____ 70. This school system is sensitive to community opinions.

_____ 71. To a large degree, the students are self-directing.

_____ 72. Groups of innovators and non-innovators have emerged in the form of in- and out-groups.

_____ 73. The counselor serves the dual function of being an administrator and a counselor.

_____ 74. The teachers are given sufficient time during the day to plan, eliminating the need to take most of their work home in the evenings.

_____ 75. A school administrator initiates communications with the change agent.

_____ 76. Teachers attend workshops teaching identification of problem areas in schools.

_____ 77. The students feel that they have some control over their learning experiences.

_____ 78. The school counselor has disciplinary responsibilities.

Please rate on a 1 - 5 scale (as indicated below) how closely each item describes the school you are rating, or use one of the alternative symbols:

5 = very typical
4 = somewhat typical
3 = neither typical nor atypical
2 = somewhat atypical
1 = very atypical
NA = not applicable
? = no information at this time

_____ 79. Many types of instructional materials have been examined by members of this school system in order to determine what innovation would be best suited to their needs.

_____ 80. A few of the teachers who have been with the school for a long time support innovation.

_____ 81. The central office is pushing the adoption of innovations for the benefit of federal money.

_____ 82. The principal does not often ask for suggestions from the faculty.

_____ 83. Teachers and students have an informal rapport.

_____ 84. Specific problems and needs have been identified by members of this school system.

_____ 85. Most of the teachers leave school as soon as possible after the students are dismissed.

_____ 86. The teachers at this school are encouraged to participate in summer planning sessions.

_____ 87. The principal receives most communications from the central offices by way of memos.

_____ 88. Students use some of their leisure time to do school related activities.

_____ 89. The curriculum specialist evaluates in a constructive way.

_____ 90. The central office provides individuals who are fostering research.

Please rate on a 1 - 5 scale (as indicated below) how closely each item describes the school you are rating, or use one of the alternative symbols:

5 = very typical
4 = somewhat typical
3 = neither typical nor atypical
2 = somewhat atypical
1 = very atypical
NA = not applicable
? = no information at this time

_____ 91. The principal, teacher representative, or outside agent meets wth small groups of teachers in order to receive teachers' opinion.

_____ 92. No channels exist in the organization for appealing decisions.

_____ 93. Local agencies which control funds are vague about how the funds can be used.

_____ 94. Students are viewed by the teachers as being participative rather than passive.

_____ 95. At least one-third of the students at this school are children of professionals.

_____ 96. Decisions in the central offices are based on information contributed from all levels of the school system.

_____ 97. The school board helps to obtain funding for innovations which are initiated by the individual schools.

_____ 98. Teachers at this school can give their honest opinions to the principal with confidence.

_____ 99. The principal encourages decision-making by consensus.

_____100. Although the teachers have already been working with an innovaton for some time now, they do not fully understand what the innovation is all about.

The P/I Group Gets Together

Beverly Loy Taylor

WHAT IS A P/I GROUP?

Planning refers to such activities as "forecasting, envisioning the future, constructing verbal or graphic pictures of a desired aspect of that future, and specifying possible steps toward that aspect" (Miles, et al., 1978). Planning a school may be said to be under way when a person or group is charged with the task and begins work on it.

Implementation "requires the taking of action on the real and present world in order to shift it toward the desired aspect" (Miles, et al., 1978). Implementation starts when the principal or director of the new school is appointed and has the right to act on its behalf in dealings with the outside environment. Later implementation activities include staff and student selection, actualizing the design for the school, opening for students (start-up), and early operation of the school.

Planning and implementation parallel one another from the time that the principal/director is appointed until the operating school has settled in and no longer requires major adjustments. This point may be anywhere from six months to a year or more after start-up.

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Planning and implementation functions fade as the school becomes more "institutionalized" and operates in a more or less steady fashion.

The "P/I group" refers to the "planning/implementation group," or those people responsible for the enterprise at any particular time. Thus, the P/I group might be the initial planning committee at one time, the principal/director and key aides at another time, or the principal and school faculty at still another time. It all depends upon the stage of planning and implementation involved.

Then too, even in a given stage of planning and implementation, the membership of the P/I group will shift as new members arrive and old members leave according to the needs of the individuals and of the group itself.

Sometimes the original "planners" will be replaced by "planners/implementers" who will operate the school.

Sometimes one or two of the original "planners" will stay with the enterprise and become invovled with implementation and operation activities.

WHO SHOULD BE IN THE P/I GROUP?

The issue of who should be members of the P/I group plays a large part in determing the success or failure of the whole enterprise. There are at least four ways to set up a P/I group:

- The school district appoints people
- Special interest groups (teachers union, student government) appoint representatives
- Community elects constituent representatives
- People volunteer to be members

All of these methods have been used more or less successfully, alone or in various combinations. Each has its own particular disadvantages, however. The major problems with the district-appointed group are: Appointees often are employees of the district and may not have sufficient time or planning skills for the task. As district employees they are likely to have their creative vision foreshortened by the boundaries of the district's standard procedures. Thus, innovative ideas may not blossom.

Special interest group representatives may be bound to the policies of the outside group, which will have the effect of constricting P/I group interaction and delaying clearcut decisions until approval is received from the outside.

Elected members may not have the technical capabilities for planning and may lack the clout of a community majority.

Volunteers offer a variety of skills and resources but may not have the services of skilled people who do not volunteer.

Asking the following questions will help to establish some criteria for membership in your group:

- Whom does your group represent?
- What issues will the group tackle?
- What is the group's mandate for planning?

You may or may not have the option of putting together your P/I group. But even if people have been assigned or elected to work with the P/I group, it should be possible to add others to the ranks as needed.

The big question, then, after determining whom you represent, the issues with which you are dealing, and your mandate for planning is:

> What skills, resources, and expertise does your P/I group need?

You will want to attract to your group the kind of people who can make a strong contribution to your planning work. Here is an example from one of our case studies of how one planner attracted new people.*

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*Most examples used in the four guides of MAPPING NEW SCHOOLS are drawn from Miles, Sullivan, Gold, Sieber and Wilder, Creating New Schools, Center for Policy Research, Inc., 1978.

Charged with planning Arts Coop, a regional high school for the arts that would draw a gifted students from six nearby school districts for half-time study, the initial planner decided to add other people to help with the effort. She sent a memo to the six school district superintendents and asked them to appoint members to the P/I group. She requested that each superintendent include:

- An art supervisor
- A high school administrator
- A school board member
- A community artist
- A guidance counselor

Her membership criterion was to include those people who controlled needed resources (in this case, it was the students who represented the needed resources because this half-time arts program would have to be elected by students who knew of its existence and were interested in attending). The school personnel could pave or block the way of getting students for the arts school, so the planner opted to gain their support by involving them in the planning. The community artist controlled other resources and support and also spoke for the artist/teacher's interests and concerns.

As planning for Arts Coop entered full swing, a typical listing of planners attending a meeting would include:

- An art supervisor
- A music supervisor
- A vocational education administrator
- Several teachers from the six districts
- Several community artists
- One or two interested citizens
- One or two guidance counselors
- An assistant superintendent
- A superintendent

All six districts would have at least one representative present at meetings. The P/I group kept all superintendents informed of their work and always got their input before making a major decision or pursuing an important aim.

The P/I group was characterized by its permeable boundaries. That is, new members were always welcomed.

Frequent contacts with the six superintendents served the purpose of building the P/I group's legitimacy and protecting the climate of trust.

Encouraging new members to join the P/I group assured a pool of people with fresh ideas, skills and interests who would put their energies to work on the effort.

The overall strategy in effect with this planning group was one of cooptation, or gathering and building support by incorporating key people into the P/I group.

The work of any P/I group involves both "internal" school design tasks and "external" resource acquisition activities. It would make sense, then, to include in the P/I group people who offer some ideas and expertise in these two areas.

These categories of people should be considered:

- EXPERTS -- persons with competence in the various aspects of designing the school as a socio-technical system
- OPERATORS -- persons who will actually administer or teach in the new school
- GATEKEEPERS -- key persons who control access to needed resources
- CLIENTS -- persons who will benefit from the school, such as students and parents

A good P/I model will attempt to incorporate people from as many of these categories as possible with the aim of gaining legitimacy, political representation, and creative and technical expertise.

Remember too that some people function as socio-emotional "binders" in a group, and their biggest tangible contribution may simply be their presence. While it is critical to think politically and technically about your P/I group makeup, don't lose sight of the fact that interpersonal mix also can be important.

You might want to include other categories that would offer:

- A racial or ethnic mix in the P/I group
- A male/female balance in the P/I group
- Experts in fields other than education (law, business, public relations, etc.)

EXERCISE

Beginning on the next page is an exercise, "WHO'S WHO," which can be done by a group or by an individual. If your group works on the exercise, be sure to have one person serve as a facilitator in order to keep things moving. The facilitator or someone else should write the group's ideas on newsprint for all to see. If you are working alone, brainstorm ideas and write them on paper or a chalkboard.

"WHO'S WHO" is an exercise designed to help you think categorically and concretely about needed skills and resources, important stakeholders (key figures related to the new school), and interest groups.

When you complete the exercise, you will have a chart of potential contributors to your P/I effort and a list of missing types of people that you will have to identify and recruit.

(50-60 min)

WHO'S WHO

1. Brainstorm a list of the skills, resources, and expertise needed for the P/I effort. Write the list on newsprint.

2. Now make a list of people who stand out as important stakeholders (key figures in relation to the new school), facilitators, friends, experts, representatives of interest groups, etc.

   Using the categories of people presented earlier, mark each name as an "expert", "operator", "gatekeeper", "client", "friend", or other category that is appropriate for your P/I group.

3. Using the chart on the following page, fill in the names, organizations represented, and categories identified above. An example has been done for you.

   There are two new columns:

   a) Offers -- What does each person or group stand to offer to the P/I group or effort?

   b) Gains -- What does each person or group stand to gain from working with the P/I group?

Note: You may have the name of an interest group or organization but have no person's name to fill in as its representative. That's OK; it's important to write down as much as you can think of now. you can fill in data later.

4. When you have finished filling in the chart below, you will be able to see who and what are missing. Compare the chart with #1 list from above.

5. Discuss how you might get new members in categories for which you had no names listed.

   Make a plan to initiate action in attracting those people.

HOW WILL THE P/I GROUP FUNCTION?

The multitude of tasks involved in planning a new school can be divided roughly into two main types:

- The actual planning activities which, if successful, result in a functioning school

- Organizing members of the P/I group into an effective team capable of carrying out the task

Planning requires a design for the school (Will it be a school without walls? Will there be team teaching? Will students be involved in decision-making procedures?) and the acquisition of environmental resources and support to ensure the school's survival (Where will we get the needed funds for inservice training? Will parents endorse our plans for an open space school?).

The first part, design, refers to the technical aspects of the school and its operation. The second part, acquisition of resources and support, involves the use of political strategies in order to get what is needed for the school.

Organizing members of the P/I group into an effective team refers to the interpersonal and group processes that come into play when a group of people must work together in a joint effort. How will the group make decisions? How will conflicts be resolved?

These two major task areas are distinct from one another but have a strong effect upon each other's progress. They require the use of three different sets of skills:

- Planning skills
- Political skills
- Interpersonal and group skills

Planning skills are discussed in later modules of this guide. Political skills are treated in Guide 3: Mapping Your School's Environment. Interpersonal and group skills are treated in this module and also in the second module of Guide 3: Mapping Your School's Environment.

Perhaps it is unnecessary to point out that if members of a group cannot get along with one another and reach agreement on major issues, they will not be productive in their work tasks. And yet, it is said often by members of a group that "there just isn't time to stop and look at how we work together." Improving group interpersonal skills will free members to be more effective at their planning tasks.

The P/I group comes together to carry out a specific task within a set period of time. Members establish the group boundaries of membership, their goals, work procedures, and role behaviors.

In effect, then, P/I group members create a temporary setting (themselves) to plan what they intend to be a permanent setting (the new school).

The superordinate goal is to plan the new school. The P/I group has to organize itself to do that. The group's ability to function effectively depends upon the extent to which members have considered and resolved such issues as:

- Group climate and norms
- Use of time at meetings
- Members' differences
- Managing conflicts

These issues are treated in turn.

GROUP CLIMATE AND NORMS

The group climate or atmosphere varies considerably from one group to the next, depending upon the individuals and their view of the task and of each other. Some groups, for example, operate in a formal, "all business" way, while others might be relaxed and informal with a mix of work and play. Some groups are characterized by collaboration and "togetherness"; others use an individualistic, perhaps even competitive, mode.

The level of cohesiveness in a P/I group is an important factor relating to its accomplishment of tasks. The higher the degree of members' perceptions of being influential, involved, and capable -- that is, valued by others -- the more effective will that particular group be.

Willingness to express one's opinions and ideas, trust in other members, and helpful collaboration in the group's tasks all characterize the well-functioning team.

What words would you use to characterize the present climate of your group?

____

____

How would you rate the effectiveness of your group?

/ / / / /

Low So-So Fantastic

Why do you think this is so?

____

____

The norms, or standards that determine appropriate behaviors and feelings, that are present in a group may be conscious or unconscious, spoken or unspoken, shared or not shared by all of the members of the group.

Norms are vital to the tenor of the P/I enterprise. Note, for example, the difference between these two P/I groups that we studied:

> The P/I group that planned Arts Coop had a shared norm of non-criticalness. That is, new ideas were welcomed, listened to, and explored by members. No one was hushed by someone else's "Oh, that would never work!" statement. The result was a sharing of lots of ideas, good and bad. The good ones rose to the surface and got acted upon, while the bad ones tended to sink into oblivion.
>
> A P/I group planning College High, a campus high school that would use local college resources, operated with an unspoken norm of near-automatic criticism of an idea presented in the group, particularly if described by a "low-status" member. Sometimes the ideas would get shot down before they had been fully presented. This group was not characterized by a wealth of ideas, cohesiveness, or effective action.

Developing good working norms, explicit ones, is a large part of building a team that functions well. Some good norms to consider clarifying within your group are:

- Everyone has important contributions to make.
- We air our differences and resolve conflicts.
- We take time to observe and improve our group's interpersonal processes.
- We get help from outsiders when we need it.
- We encourage creativity and welcome new ideas.

Place a check mark beside those norms in the above list that you think are shared by your group.

What other norms exist in your group?

What important norms do you think are missing from your list?

What NEGATIVE norms do you think are hindering the work of your group?

Compare your responses on these three pages with those made by others in your group. Consider establishing some working norms that people in your group believe would be helpful.

USE OF TIME AT MEETINGS

Because your time frame is much more limited than might be the case in an ongoing, permanent setting, it is necessary that it be well spent. Your group, after all, has only a limited time to complete its P/I tasks.

It is important that the group clarify:

- How much time it has to complete its work
- How often it should meet
- What pace fits its workload and work style
- How to use time most productively

Overall timetabling for your P/I work is treated in Module 4 of this guide. Here, since P/I groups spend so much of their time in planning meetings, we'll look at a seemingly self-evident, yet vastly under-used, tool for conducting a meeting: the agenda. A brief comparison of two P/I groups' meeting styles will point to the importance of using an agenda:

> Group A would receive in the mail ahead of time the minutes and attendance list from their previous meeting as well as an agenda and an RSVP card for the upcoming one. Meetings started and ended on time so as not to tax group members. Items were explored to the satisfaction of everyone present before moving on to the next. This group always had a clear sense of what it had accomplished at a meeting.
>
> Group B seldom used an agenda and when it did have one prepared, it more often than not failed to follow it. Discussions rambled from one topic to another and sometimes turned into "gripe" sessions. No sense of closure on a topic occurred, which caused the participants to get caught up in circular planning of the most tiring sort. People showed up a half hour or an hour late and often not at all. Participants felt little in the way of progress, and, in fact, are still "planning" after four years.

While Group A's stellar quality is not being ascribed solely to its use of an agenda and efficient meeting management, it cannot be denied that the group's style is much more productive than that of Group B.

Making an agenda is a fairly simple, straightforward task. It may be done by any of the following methods:

- The person who is convening the meeting ("formal" leader or rotating leader or participant) determines important topics.
- Posting a sheet of newsprint in a central spot for people to write in agenda items.
- Making the next meeting's agenda the last piece of business on the previous agenda.

Items are determined by issues that call for members to:

- Share information or update everyone
- Make decisions
- Develop policy statements
- Resolve questions or conflicts
- Introduce new members or visitors
- Sum up discussions

Agenda items should be prioritized ahead of time or at the outset of the meeting. Who will introduce each item, the type of item it is (e.g., information, discussion, decision) and how much time will be needed for it should be established.

Keep in mind that sometimes an open-ended discussion is needed. When working on such areas as vision or philosophy development, much depends upon the mood, creativity and attendance of the group that day.

In some planning situations, meetings may be more political agreement sessions than creative sessions. Sometimes they might be more businessy, other times more conceptual. You might have tighter deadlines sometimes and other times you can afford to be less rigid about time

The agenda should be realistic with respect to the amount of time and energy available for the meeting. Agenda items and priorities may be revised by the group at any time before or during the meeting as necessary.

If possible, the agenda should be sent to participants ahead of time so that they can prepare for the meeting.

At the meeting, follow these guidelines:

- Start the meeting on time.
- Review and revise the agenda as needed.
- Have supplies on hand (newsprint, markers, pads, pencils).
- Finish one item before moving on to the next.
- Clarify who will take which next steps.
- Summarize accomplishments.
- End the meeting on time.

Newsprint, by the way, is an excellent tool for laying out in front of everyone the points of discussion. Seeing them is a means for understanding and analyzing them. The informal quality of newsprint also encourages greater participation in the discussion by allowing people to "work" with what's there by adding, subtracting and changing ideas. This participation is the very core of ownership or commitment to the ideas that gradually evolve.

> Time spent in agenda development often is time saved in meetings ... but not always.

While most P/I groups are political and task-oriented, they are also, by virtue of their charge to create/design a new school, groups in which creativity, imagination and critical thinking must flourish. Sometimes it's dysfunctional to try to stick to an agenda which may be less important than what's on the table. At the same time, it's necessary to guard against agenda manipulators and controllers. Awareness of what is happening with the group and the relative importance of agenda items helps in managing meetings effectively.

MEMBERS' DIFFERENCES

Each member brings to the P/I group different hopes, expectations, assumptions, skills, resources and work styles.

What are they and how will they affect group functioning?

What are the similarities among group members?

What motivations do members have for working in the P/I group?

How can the P/I group best use the skills and resources of each member?

As your P/I group continues to work together, you will become more aware of your individual differences and learn how to assess yourselves. At one of your meetings try to get in touch with the group process, with the way in which members work together. One example you might try is the following:

- Observe the rhythms in your group. How fast do people speak? How much time is left after one person finishes talking and before another starts? Are the pauses uncomfortable? Tense? Relaxed? Even? Uneven? Does any one person seem to control the rhythm of the meeting? Is it the leader? Does s/he slow things down (by talking slowly, by writing on newsprint, by controlling the pauses between speakers) in order to follow the flow of the group? (The leader of the P/I group that planned Arts Coop allowed for long pauses and silences after she asked for ideas and suggestions because her experience told her that new groups take a while to warm up, that they go much slower until trust builds and people feel relaxed and not intimidated.) Does the leader speed things up (by talking fast, by worrying about getting through the agenda, by looking at his/her watch)?

How might the rhythms in your group affect your work?

You could also try to examine your own assessment of people in your group. For example:

- Observe what happens in a meeting without passing judgment. That is, instead of thinking "Pat always does that!" or "Sandy's so rude," start off with "I see that this is the third time that Pat has interrupted someone" or "I heard Sandy laugh while Andy was explaining what happened."

- Separate your editorial comments from what is actually taking place. In the two sentences below, the first is a description of an action; the second is an editorial comment about it. The second is marked with a set of double parentheses to denote a personal impression rather than a fact.

  He moved his chair back, stood up, took a
  deep breath, and began to speak.
  (He seemed uncomfortable.)

- Get in touch with your own biases which relate to your group and the group's task. For example, admit to yourself that you hate committees, resent being appointed to the group, or feel threatened by some higher level members. It isn't necessary to make your biases public. Just realize that each member is coming to the group from a different place and with different reasons, and that it's important to separate the "reality" as objectively observed (or as closely as possible) from a distortion based on prior prejudices or feelings.

Keeping personal feelings and interpersonal processes clear will help in dealing with the inevitable problems or misunderstandings.

MANAGING CONFLICTS

With any group of people, it is inevitable that there will be disagreements, tensions, and conflicts due to different expectations, values, opinions, and work styles.

It is important to deal with conflicts if they are detrimental to group functioning. Resistances and bad feelings that are not brought to the surface will eventually demoralize the whole group in addition to the individual members involved. Much energy will be wasted unless the conflict is dealt with.

Sometimes it's better not to use the whole group to resolve a conflict, particularly when the conflict is of an interpersonal nature and involves two people. But if the conflict involves the whole group, then group resolution may be needed.

While conflict may be debilitating for members, it is also true that moderate amounts of conflict can have such positive effects as increasing motivation and energy heightening creativity, deepening understanding of one's own point of view, and perhaps even managing one's own internal conflicts.

The two aims of conflict management are to gain resolution, that is to eradicate the opposition, or simply to control the level of conflict so that it doesn't have a strong effect on the group's productivity. Reducing or clarifying the conflict is often sufficient for the group.

Leaders of groups may rely upon alternate conflict management styles, such as:

- Deny that there is a problem
- Ignore disagreements in the group
- Drift, do nothing
- Smooth over the differences
- Explicitly decide to postpone action
- Argue, debate about it, but don't decide anything
- Explicitly decide to "live with the problem"
- Compromise
- Get expert information or advice from a third party
- Face the problem and work it through
- Force a decision

Which of these conflict management styles is/are most typical of your P/I group? Least typical?

Dyer (1977) believes that it is useful to look at conflict as what results from the violation of expectations. He recommends that groups shift to a problem-solving rather than staying with a blaming mode and suggests that groups first identify behaviors that violate expectations and then try to negotiate agreements. The conditions for negotiation include:

- Agreement to come together and work on the problem

- Agreement that the problem exists, should be solved, and that participants in the conflict have responsibility for working on the issues

- Acceptance of the position that the aim of negotiation is to understand and work with each other, not necessarily to "like" each other

- Agreement to accept the differences and work on suitable solutions, rather than looking for fault

Harrison (1971) describes a negotiation process that could be used by two individuals or by a group in conflict:

1. Individual A or Subgroup A writes down what they want the other (B) to start doing, stop doing, and continue doing in order to meet their expectations. Individual B or Subgroup B does the same for A.

2. A and B share their lists with each other by displaying them.

3. A and B then negotiate exchanges by agreeing on what one will do in exchange for an equal alteration by the other.

4. It is helpful if A and B then put their agreement into writing and then sign their "contract." Signing such agreements often has the effect of building commitment to the new behavior(s).

A variation suggested by Dyer is to precede the list sharing with a prediction from A of what B wants and vice versa. Often, the predictions are surprisingly close, which can facilitate the agreement between the two parties.

Sometimes personal style creates unnecessary conflict when it is misinterpreted by others. Often we think we are being "good" or effective or at least neutral when in actuality, our actions may be perceived by others as aggressive, caustic, or indifferent.

It's difficult to be aware of the effects of our behaviors unless they are extreme, thereby eliciting responses that will seem appropriate or inappropriate to our intentions, or unless we ask people for feedback on our behaviors.

The quiet person who hardly contibutes to the group discussion may be shy or selective in discussion, not bored or uninterested in the topic. The person who interrupts others in order to make summaries may be expressing a need to organize the discussion rather than to take the podium.

Certain conditions make for effective P/I work. People seem to work best when:

- They are motivated. That is, their self-interests mesh with the purposes of the group and no one feels manipulated.
- There is strong coordination of efforts. Members are not working at cross purposes or are not duplicating each other's efforts.
- They are clear on what has to be done, who will do it, and when it has to be done.
- They have the needed tools to carry out the work: information, skills, resources.
- They feel powerful, able to accomplish the tasks. They have a certain amount of control over decisions affecting their work.

Sometimes these conditions must be created by a strong leader who defines the tasks, anticipates needs and meets them (as with acquiring information or the services of a skilled consultant), and encourages the group by providing a supportive environment for its work.

Sometimes P/I group members collaborate to provide these conditions for themselves.

Having fun is an important part of conditions for effectiveness. P/I work need not be all serious and tasky.

It is mentally health-giving if everyone gets some pleasure out of the social setting as well as out of completion of planning tasks. Playwrights build comic relief into their dramas. Why shouldn't P/I groups do the same?

> Several of the P/I groups in our study recognized the usefulness of intensive workshops and weekend retreats for focusing on their work, but more importantly, getting to know one another better. They found that fostering social ties in the group contributed greatly to such aspects of planning as conceptualizing and vision development. One group made a point of celebrating its accomplishments (getting funded, reaching agreement on goals for the school, and so on).

What are some other possibilities for you and your group to enjoy each other and your P/I work?

HOW WILL THE P/I GROUP MAKE DECISIONS?

The P/I group makes many, many decisions as it plans and implements the new school. How it makes decisions is greatly influenced by the group's structure and history, the relationships among members, the formal role definitions of members, and the nature of the issue being decided.

People tend to be more committed to a decision that they have helped to make. It is important, then, to include in its formulation those people needed to carry it out. Likewise, a decision affecting only a few people or viewed as relatively unimportant by P/I group members may be handled by that minority or by an individual. A group decision is most appropriate when:

- The group is directly affected by it
- The group must carry it out
- A variety of ideas and views are desirable
- The group works well together

This section of the module deals in turn with these topics:

- Methods of decision making
- Steps in decision making
- Aids to group decision making
- Role of the leader in group decision making

METHODS OF DECISION MAKING

There are many methods of decision making. Listed below are some, arranged in order of increasing numbers of people used:

- Plop.

  A proposal is suggested by an individual, but it falls with a "plop." No one else responds to it and a new topic is opened. Plopping is frequent in new groups faced with a bewildering array of complex issues.

- Self-authorized.

  An individual makes a decision and then carries it out by his/her own authority or as a result of others' passivity.

- Handclasping.

  A decision is made by two members who join forces. The rest of the group follows along.

- The clique.

  A minority of group members agree in advance upon a decision and then carry it through. This collusion may erode group cohesiveness.

- Majority vote.

  More than half of the group members agree to a proposal. While this is a legitimate method, its difficulty lies in the possibility that the minority who voted against it may not participate in carrying it out or may even sabotage it.

- Unanimity.

  All members must agree or the action cannot be taken. There are two problems with this method: The pressure to conform may win 100 percent agreement, but as with the majority vote method, some members may disagree and fail to carry it out.

Second, it takes just one member to block the whole group (veto power), with the result that one person will be satisfied and all others will be frustrated.

- Consensus

All of the above methods assume a fixed solution to which people vote yes or no. The consensus method is different.

A preliminary proposal is made and an informal poll is taken to get everyone's reaction. Those who disagree then suggest how the proposal could be changed to be more acceptable to them. Another poll is taken on the new proposal, more alterations are made, more views expressed, and so on until finally the proposal satisfies everyone. This method results in a strong consensus.

Consensus also may indicate some members' willingness to give a proposal a try, even though they're not enthusiastic. If it doesn't work well, it is then revised or scrapped. This method results in a weak consensus.

Consensus decision making requires that equal weight be given to all opinions, regardless of who states them.

The majority vote, unanimity, and consensus methods of decision making require that all members indicate their attitudes about the proposal. . The consensus method has the additional requirement that those in disagreement offer ideas for improving the proposal. Consensus does not work when members are silent or passive.

Decision making is not pure and simple, and attempts to make it so can result in a decision-making structure that is too rigid for dealing with issues substantively, or that takes inordinate amounts of time to make simple decisions, or that makes people feel manipulated because they participated in a decision that essentially had been made already.

It is preferable to use different decision-making styles for different types of decisions. For example, on policy decisions that require the cooperation of a number of people to carry them out, a consensus model would accrue the necessary commitments to the ultimate decision. On the other hand, a logistical decision can be made on the basis of a majority vote, since everyone may not be likely to be involved in carrying it out.

Any decision that a group makes should be judged on at least two criteria;

- Quality -- how well it copes with the reality that the group is facing
- Commitment -- how committed the group members are to carrying it out

STEPS IN DECISION MAKING

The steps in decision making that are presented below represent one method of rational decision making. The process may be used by an individual or by a group. Because they work better when there is a variety of ideas, it is recommended that the group practice consensus decision making by following the steps together.

WITH YOUR GROUP, SELECT AN ISSUE THAT YOU MUST RESOLVE. CHOOSE ONE THAT ISN'T TOO COMPLICATED.

UNDER EACH STEP IN THE PROCESS THERE IS A SPACE FOR RESPONSES. YOU MAY USE THOSE SPACES TO RECORD GROUP IDEAS. YOU MIGHT FIND IT HELPFUL IF ONE PERSON RECORDS IDEAS ON NEWSPRINT.

FOLLOWING AN EXPLANATION OF THE STEPS, AN EXAMPLE FROM OUR CASE DATA IS GIVEN.

NAME OF ISSUE: ____

- STEP 1: DEFINE THE SITUATION

Clarify the issue, consider its implications, elaborate on it.

DO: Engage in a detailed discussion in small groups and then with the whole group.

DON'T: Assume that the situation is clear to everyone. Be overly abstract about the situation.

WHAT ARE THE IMPORTANT ELEMENTS OF YOUR SITUATION?

____

____

- **STEP 2: GATHER DATA**

Finding data that bears on the situation may be within your reach already (you may have it by virtue of your own experience or earlier data gathering or you might have a relevant report in hand). Perhaps you'll have to talk with other people who have information or do some research.

DO: Be sure that you have enough information with which to make a decision.

DON'T: Overdo data gathering so that you have to cut short your time for the other steps.

WHAT DATA BEAR UPON YOUR SITUATION?

- **STEP 3: SUGGEST ALTERNATIVE SOLUTIONS**

Brainstorm ideas on the various alternative solutions for the situation.

DO: Create a relaxed, non-threatening climate. Provide periods of silence for ideas to come forth.

DON'T: Criticize solutions at this point. Be overly formal or rigid. Get "stuck" on one solution that would prevent thinking about other possibilities.

WHAT ARE SOME ALTERNATIVE SOLUTIONS FOR YOUR SITUATION?

- **STEP 4: TEST THE ALTERNATIVE SOLUTIONS**

Examine all of the alternatives according to suitability, members' attitudes about them, possible consequences of trying them, new data that hadn't been considered before.

DO: Ask "what if" questions.
Examine all of the alternatives with an open and inquiring mind.

DON'T: Be overly protective of any ideas. Close up too quickly.

WHAT ARE SOME OF THE POSSIBLE CONSEQUENCES OF YOUR ALTERNATIVE SOLUTIONS?

- STEP 5: CHOOSE AMONG (OR REVISE) ALTERNATIVE SOLUTIONS

Choose one alternative or a revised combination of alternatives, using data from your testing, that will offer a solution to your situation.

DO:
Hear opinions of all group members
Test for consensus and shape the choice accordingly.
Summarize the discussion.

DON'T:
Identify a solution with a particular person.
Coerce members into voting "yes."
Spend more or less time than is needed to make a choice.

DESCRIBE YOUR CHOICE OF A SOLUTION TO YOUR SITUATION.

WHY IS IT A GOOD ONE?

- STEP 6: PLAN FOR ACTION

Make plans for carrying out the decision.

DO:
Assign responsibility to one or more members (jointly) fo carrying out the decision.
Establish the parameters of what has to be done.
Set a time period in which the action should occur.

DON'T:
Ignore new data that might affect the action.

WHAT IS YOUR PLAN FOR ACTION?

WHAT IS THE TIME PERIOD FOR THE ACTION:

HOW WILL YOU EVALUATE THE ACTION?

The experience of another P/I group appears below as a follow-up to your work on this decision-making process.

THE SITUATION

The P/I group for Arts Coop had to decide who should hire the director for the school. It was important to please all six districts and communities from which the school would draw students. Also, whoever did the hiring would have to know the aims of the school and be able to internalize them.

THE DATA

Many people believed that there should be a committee that drew from all of the districts. School superintendents could be asked to name appointees. There were community people who were willing to serve. The committee had to be fair, objective, and representative. Members of the P/I group could even constitute a hiring committee themselves.

THE ALTERNATIVES

1. Committee made up of all outsiders except for the P/I group leader, who could serve as an ex-officio, non-voting member.
2. Committee appointed by the six superintendents.
3. Committee of community volunteers.
4. The present P/I group itself.

THE TESTS

1. Too much of a burden on the P/I group leader to represent all of the P/I group memebers.

2. and 3. Might not be representative on a geographical, subject orientation, and value level.

4. Might not be regarded as fair, objective, or representative by outsiders.

THE CHOICE

A combination of P/I group members, appointees from the superintendents, and recommendations of others that would met the balance requirements.

THE PLAN

The P/I group would recommend people. The P/I group leader and the superintendents would coordinate the list and would invite additional participants to achieve the necessary balance. The committee list would be complete by January 15.

AIDS TO GROUP DECISION MAKING

Making group decisions calls for skills and practice. Some aspects of decision-making skill also serve as a reminder of things to keep in mind:

- Everyone should be clear on what type of decision-making model the P/I group is using at a given time (majority vote? unanimity? consensus?).
- There should be willingness to hear and consider minority or unusual ideas.
- Use of the P/I group's resources by hearing all members' ideas.
- Assessment of alternative solutions by using "what if" thinking.
- Everyone should be clear on the decision that is reached and how it will be put into action.

ROLE OF THE LEADER IN GROUP DECISION MAKING

It is a mistake to think that the formal leader of the P/I group makes all of the decisions that guide the planning and implementation activities.

Rather, the leader's role can be likened to that of the stage manager. That is, the leader sets the stage, creates the conditions, in which good decision making can thrive. While group decision making can be time consuming and often nerve wracking, its great advantage is to relieve the leader of the full burden of responsibility for making and implementing decisions. The group that is highly involved in making decisions "own" those decisions and is committed to carrying them out.

Not all P/I decisions need to be made by the group. But the leader must think carefully about the decision areas: Which should he or she make? Which should key people or subgroups make? Which should the whole group make?

The leader (a role which might be a rotating one or a fixed one) is actually a facilitator or coordinator of the P/I group who:

- Guides discussions and processes
- Encourages all members to participate
- Exhibits acceptance of others' ideas by being non-critical
- Requests or offers clarification of others' views
- Encourages the airing of conflicts and the group's attempts to help in their resolution
- Seeks group reactions to ideas before even considering their implementation
- Relates the values and aims of individual members to the overall planning vision
- Summarizes discussions and decisions
- Inspires and encourages members with the belief that the group can and will do what they set out to do
- Keeps things moving

The main issue that the leader must consider is this:

Is the right person or group making this decision?

Leaders ordinarily have a license to allocate decisions -- to decide who should decide. But that license can be revoked if it is exercised unwisely or arbitrarily.

Epigraph:

"When you have to make a choice and don't make it, that is in itself a choice."

--William James

Building a Relationship - an excerpt

Ronald G. Havelock

This is where any innovation or change effort should begin. A strong, creative relationship can carry a change program through the most difficult obstacles. While innovation is generally difficult it can become impossible if there is a bad relationship between the change agent and his client. Your relationship with a prospective client system must be carefully planned and thought through if you are going to succeed with a project. This first chapter provides some specific criteria to help you-the change agent-assess your relationship with a client system. If you know where you stand with a client and if you know how he sees you, you will be in a better position to adapt and enhance this relationship as the change effort progresses.

A. WHO IS THE CLIENT

Throughout this manual we will use the term "client" to refer to the people whom the change agent is trying to help. This "client" might be an individual or a group of any size from a classroom to a community. Sometimes we will refer to this group of people as a "system" if they seem to have common goals and are trying to work together to achieve those goals. Sometimes it will not be entirely clear just who the client is. We often find that we cannot work effectively with one group unless, at the same time, we are working with others to whom they are related. This network of relations can get pretty complicated and unmanageable. Therefore, it is important, at the outset, to define who the client is. This boils down to two basic questions:

What group are you going to work with directly?

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What are the other groups to whom your direct client is related?

1. Relating to the Client System

What Are the Norms of the Client System?

Boundaries of various kinds define the client system because they separate people who are members from those who are "outside." Some boundaries are physical and obvious - like the wall and the barbed wire fence - but most boundaries are less visible. For example, the members of any social group share a number of common beliefs, values, and rules of behavior. These shared "norms" describe what it means to be "us" instead of "them." A change agent should make himself familiar with these features of his client system. He should know how sharply they are defined and how strictly they are adhered to by all members.

Although these shared beliefs and behaviors are seldom unique, they may be viewed as unique by the members. Most social systems maintain their group identity partly through the mechanism of local pride which identifies what "we" have as special, as high status, as most important and most relevant. This belief that "we are unique" can be a major stumbling block to any program for change: it may hinder both the awareness of a need for change and the acceptance of innovations from "outside."

Who Are the Leaders?

In attempting to establish a satisfactory relationship, an understanding of the formal leadership structure is also important. Some systems are only loosely and vaguely structured while others have a strict chain of command. The more clearly defined and structured the leadership pattern, the more critical it is for us to establish solid relationships with the leaders.

Who Are the Influentials?

In addition to the formal chains of command, there are many informal channels and leadership structures. It is most important that the change agent know the informal leaders. You should know the "influentials," those key people to whom others turn for new ideas. Most social systems contain such "opinion leaders," respected friends and colleagues who set the standard for the group even though they may not have formal status as "leaders" or "supervisors."

Who Are the Gatekeepers?

The change agent may also find certain individuals who hold key strategic positions with respect to the flow of new ideas and information. Such gatekeepers play a critical role in innovation and they may be distinct from both the formal leadership and the opinion leadership discussed above. The librarian, the guidance counselor, or the assistant principal may hold little formal power or informal influence, but they may still be in key positions because they control channels of information on certain topics. The "boss's secretary" is probably the most famous example of the gatekeeper in this sense.

With Whom Should You Choose to Work?

Most change agents find themselves in the position of having to select from the entire client system only a few members with whom they will be able to work directly throughout the change effort. Successful change agents have found it wise to try to include people who represent the following system characteristics:

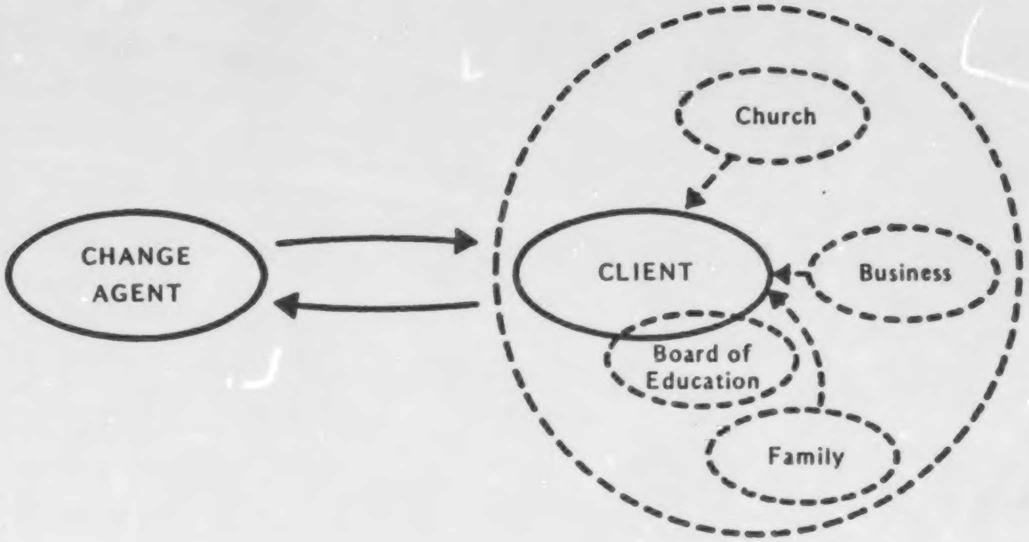
- opinion leadership
- formal authority
- representative of major factions or vested interests
- public relations ability
- credibility and respectability

By keeping in mind these major characteristics you can identify direct clients who will be very effective in aiding change efforts. With such people working on your side, you will have a good chance of influencing the entire client system. In choosing this "change team," however, you should not forget a sixth criterion which in some ways is more important than all the others. This is compatibility with you. If you cannot work together effectively as friends and colleagues your project will be in trouble.

2. Relating to the Larger Social Environment

What Are the Norms in the Community?

No group of human beings is completely isolated from the influence of "outsiders." All systems and organizations exist within a context of other systems of which they are a part and upon which they are dependent. Therefore, the change agent must not only consider the characteristics of the particular client he is serving, but he must also consider the nature of the community, the larger social system of which his client is a part.



At this initial point in the relationship, there are three questions about this larger system that you should be able to answer:

Who are the most powerful and influential people in the community?
How do these people usually react to innovation in the community? (Are they conservative or progressive?)
How can these people be approached and influenced to endorse the change effort?

Who Are the Influentials in the Community?

If you are able to review the history of the community, you will usually be struck by the prominence of certain groups-pressure groups, key individuals, and key institutions-which have had a very strong influence over what has gone on in the client system. For example, in studying a school in a particular community you may find that the school board has a great deal of power, that the superintendent or one of his assistants is particularly important, or, perhaps, that certain progressive or conservative pressure groups have major influence in either fostering innovation or in inhibiting or disrupting it. Outside pressure can lead to increased conflict within the client system; it can create an atmosphere of rigidity and complacency. You must be sensitive to the likely effects of these different "outside" pressures on your clients, for you will need to be able to make a quick assessment of the relative potency of various forces while you are in the process of developing the relationship.

What Is the Community Leadersh.p Like?

Certainly, the change agent will want to take a good look at the leadership structure in this social environment, remembering that the environment, like the client itself, is a system. It would be useful to know to what extent the leadership of the social environment is cohesive. Does it work as a harmonious system? Is it factional and strife-ridden? Or is it merely diffuse and weak? Also, as a change agent, it is important to know how the leadership may be approached. Can an outside change agent safely make contact directly or should he use inside representatives as emissaries? If the leadership is factional, are all factions approachable? Furthermore, are there specific kinds of conventions and rituals that must be observed when dealing with the leaders.

What Percentage of Your Efforts Should Be Devoted to These Outside Forces?

The effort you expend in identifying and dealing with these outside social forces will vary greatly from case to case. Sometimes, it may only be necessary to make a casual accounting of these external forces. Nevertheless, the testimony of countless change agents suggests that these outside forces are almost invariably underrated in the early stages of a project.

B. WHAT IS YOUR RELATIONSHIP AT THE VERY BEGINNING?

A new change project seldom represents a completely new beginning. Here, as in most of the affairs of life, past is prologue. The success of a client's past encounters with change and with change agents will color greatly the success of future relations with you. When you are starting out on a new project you are likely to be in one of four situations: (1) no prior relationship with the client; (2) reestablishing a formerly positive relationship; (3) reestablishing an ambiguous relationship; and (4) redefining an on-going relationship. Each of these situations has special advantages and disadvantages which we will discuss below.

1. The Blank Slate

A good relationship is a complex and delicate bridge, very difficult and expensive to build and very important to maintain. One can only really appreciate this fact when starting completely new. In a new relationship, nothing can be taken for granted. You must be acutely aware of norms and values, leadership, influence patterns, and so forth, while at the same time you are maintaining an image of complete trust and serene confidence. The number of concerns which will tax your energy and absorb your attention is greatly multiplied.

A completely new relationship is beset by a host of uncertainties and unknown quantities. The change agent is faced with the task of acquiring information from every available source, while at the same time he is making crucial decisions about the project. Such decisions will inevitably be based on partial and distorted knowledge which may make or break the project. Needless to say, it is a delicate task.

Nevertheless, there are many benefits in the brand new relationship. First of all, the new change agent is not initially identified with any special internal faction. Thus he may have a chance to become and to remain an objective observer as well as a friend. Secondly, he may derive special benefits from his initial "guest" status. For a complete newcomer, even potential enemies will be polite and will not try to shout him down or shove him out without a fair hearing; he may be granted a kind of honeymoon period during which he is relatively free from critical scrutiny and harsh judgments. If you sense that most members of your client system start out with this open-minded attitude, you should take full advantage of the opportunity to assure all factions of your own open-mindedness and eagerness to be a friend and helper to all. A new face may suggest to the clients that new things are truly possible, whereas an old face with new ideas may merely be seen as an old face with old ideas.

2. Reestablishing a Good Relationship

If the client already knows you and values your past service, you have a very strong base from which to begin a new change project. Such an advantageous starting point should not be taken for granted, however. The cautious change agent might ask himself the following questions in preparing for a new project with an old client:

> Does the client still view the former relationship as having been positive?
>
> Are there any aspects of this relationship which could stand even further improvement?
>
> Have there been any intervening events which could have muddied the waters?
>
> Could the nature of the prior relationship lead the client system to any erroneous expectations about this forthcoming change activity?

By preparing in advance to deal with such potential snags, the change agent can ensure continued growth from a solid base.

3. Reestablishing an Uncertain Relationship

It is difficult, but not impossible, to make a fresh start with a client with whom the prior relationship was not fully adequate. In such a situation it is advisable, however, to have substantial assurance that the prospects for success are now, indeed, better. The change agent can evaluate his probabilities for succeeding by answering the following questions:

> Have you made an adequate diagnosis of the problems in the prior relationship? Has anything been done in the interim to correct any of these?
>
> Have you attempted to build a new image of yourself as a change agent, and to instill new expectations among your clients?
>
> What, if anything, has happened to the client in the interim that would alter the prospects of success-either positively or negatively?

If the previous encounter was, in fact, a failure, it would be unwise to begin all over again before the problems in that relationship are patched up and new expectations are instilled. Even then there should be some dramatic evidence that a new start would be successful (e.g., a major change in the leadership of the client system).

4. Redefining an Existing Relationship

Very frequently, in assuming the role of change agent, a person is moving out of a previously held role with which the client system has him firmly identified. This is almost always true of the change agent who emerges from the client system itself, as the teacher or administrator who becomes director of a new federally funded project. Modifying or redefining an existing relationship may require a good deal of skill and sensitivity to human relations. Some of the major pitfalls are indicated below:

> Has the client been adequately informed that you have assumed a new and different role?
>
> Does he show concrete signs of recognition that his relationship to you as a change agent is new, and that he accepts this fact happily? (E.g., is he willing to bring you problems that he would not formerly have discussed with you? Are you referred to in informal conversation and in writing by your new role?)

> Are you sufficiently comfortable in performing this new change agent role so that you will not slip back into "old role" behavior patterns if, for example, your associates start making demands of you to perform in your old role?

The need for training and practice in the skills of relating to clients is nowhere more apparent than in the situation which requires you to modify an existing relationship.

C. INSIDE OR OUTSIDE?

Although such distinctions are not always clear, change agents have long debated the relative advantages of beginning as an insider or as an outsider. When all the pros and cons are tallied, however, neither position seems to be clearly superior. A recounting of the major advantages and disadvantages of each may be helpful.

1. The Inside Change Agent

The Insider Has These Advantages:

He knows the system: he knows where the power lies, where the strategic leverage points are; he is better able to identify the gatekeepers, the opinion leaders, and the innovtors than a newcomer.

He speaks the language, literally and figuratively; he knows the special ways in which members discuss things and refers to things; he has the accent, the tone, and the style.

He understands the norms (the commonly held beliefs, attitudes and behaviors) and, at least in part, he probably follows them and believes them himself.

He identifies with the system's needs and aspirations. Because he is a member, the system's need is also his pain. Thus, he has a personal incentive for helping.

He is a familiar figure, a known quantity. Most of what he does is understandable and predictable as "member" behavior; therefore he doesn't pose the threat of "the new" and "the unfamiliar."

The Insider Also Has These Disadvantages:

He may lack perspective. He may not be able to see the client system as a "whole" because of the particular place from which he views it and from which he has always viewed it.

He may not have the special knowledge or skill relevant to the innovation. He may not have had enough outside training or experience to be a true expert.

He may not have an adequate power base (unless he is at the top of his system). His plans may be confronted by superiors or competing peers.

He may have to live down his past failures or the hostility generated in some by his past successes.

He may not have the independence of movement so often required to be an effective change agent. The obligations of membership may severely limit the time and energy that he can invest in his new role.

The inside change agent usually faces the difficult task of redefining his on-going relationships with the other members of the system. In assuming the new role of change agent he must be able to change the expectations that his associates have about how he will behave and how they will relate to him. As noted in the previous section, this is sometimes difficult.

2. The Outside Change Agent

The Outsider Has These Advantages:

He starts fresh in many cases and is not burdened by negative stereotypes.

He is in a position to have perspective; he can look at the client system objectively Thus, he may be able to see problems that the insider would not see and he may be able to identify needs and opportunities which insiders would be unable to perceive. Moreover, insiders often have a special axe to grind. They tend to see this or that problem as most pressing because it is the problem which impinges upon them most directly. The outsider, on the other hand, can look at the problems of all members collectively and, thus, make a more objective diagnosis. (Outsiders are not always so objective, of course. Often, indeed, they are heavily invested in the "sowing" of particular innovations and, consequently, the stressing of certain needs. Nevertheless, the outsider is in the position to be objective about diagnosis.)

He is independent of the power structure in the client system. He always has the option of pulling out if and when he deems it necessary. He is not compelled to identify with any particular faction and he is not forever threatened and inhibited by superior authorities.

He is in a position to bring in something genuinely new. As an outsider he is more likely to have had the opportunity to gain expertise beyond that which the client system already possesses.

The Outsider Also Has These Disadvantages:

He is a stranger. Therefore, he represents a potential threat. What he will do is unknown and unpredictable; it might cause discomfort, conflict, or some sort of disturbance to the natural order of things.

The outsider may lack the knowledge of the insider; he may not understand the system, its language, norms, or values.

He may not "care enough." He may not be able to identify adequately with the needs of the client. The pain is not his pain, so he may be relatively indifferent to the needs which the client feels most acutely.

3. The Inside-Outside Team

In order to capitalize on the advantages and avoid the problems of both insider and outsider, many experienced change agents have suggested that the best solution is a "change agent team" in which both insiders and outsiders work together. Hence, the insider who is initiating a change effort would do well to enlist someone from the outside to work with him. Such an outside person could provide an "expert" legitimacy for the insider's efforts, in addition to contributing some real expertise. He could provide an objective perspective on the world in which the inside change agent is working. And the outside expert could give moral support to the insider whose efforts to do what is "right" for his system are being received by his colleagues with something less than enthusiasm.

Conversely, the outsider who initiates change would do well to enlist the inside support of some member who both understands the client system and is familiar with the change process. Preferably, this insider would be someone with reasonable security and status within the system, either as a leader, an influential, or a gatekeeper. Any selection of members for the inside-outside team should try to maximize the strengths of both positions in the service of innovation.

D. MANAGING INITIAL ENCOUNTERS

A relationship builds on the first encounter. What happens in the initial contacts between you and the client, how he sees you and how he feels about you initially, will determine whether or not you will be able to proceed into any other stage of problem-solving. In a sense you are a package which the client is going to buy. Most clients want to look the package over and read the label first. The first contacts are used by the client and by you to size up each other and take a quick first reading. Therefore, you must plan and prepare for these encounters with special care. Four considerations are paramount: friendliness, familiarity, rewardingness, and responsiveness.

1. Friendliness: A change agent is an intruder, and as for any intruder the client must ask himself, "Does he mean us well or ill?" The question may seem absurd to the change agent; after all, he knows he's a nice guy. To the client, however, there is nothing obvious about this unless he starts with a high trust for strangers. On the other hand, initial criteria of friendliness are usually not hard to meet: a smile, a firm handshake, a straight look in the eye, a warm greeting (making a firm mental note of the name of the person we are greeting and using the first name whenever we can). It also helps to make some positive and sincere comment of recognition such as some special attribute or accomplishment of the school, the place, or preferably the person himself. Most of this probably falls in the category of "etiquette" but it is not trivial in the first encounter.

2. Familiarity: As a person who has deliberately chosen to make himself an agent of change, you are different. Yet effective change agents are usually similar to their clients in most respects or are seen so by the client. Therefore a change agent should try to be a familiar object to the client in ways that are not important to his mission. In most cases this means at least in dress, outward appearance, speech, and bearing. It also may help to identify some common interests which are far removed from any change project, such as sports, entertainments, or politics (that is, if you are both likely to be on the same side of an issue). Jokes or humorous comments which are likely to be shared are especially effective in draining out some of the tension that will inevitably be in the situation. In any case, small talk, even about the weather, helps to make you a familiar object in initial encounters.

3. Rewardingness: The change agent should find the earliest opportunity to do something for the client

that will be perceived as helpful or useful. The point of such an act is not the help itself, but the idea that is planted that "this person can be helpful." Usually this token reward can be merely in the form of a useful piece of knowledge relevant to a problem that the client is concerned about. It might be a book or a pamphlet or perhaps a useful lead to a person or a technique which the client has not thought of.

4. Responsiveness: The change agent should always be a good listener but this is especially true at the beginning of a relationship. Most importantly he should show the client he is a good listener by nodding if he understands, by asking for clarifications when he doesn't, and by indicating verbally and non-verbally that he is interested and cares about what the client is saying, shares his feeling, and wants to be helpful in whatever way he can.

   One specific way in which the change agent can indicate responsiveness without commitment to solutions is by repeating back to the client what he has paid in different words. This gives the client a chance to hear his own thoughts from another and to correct misunderstandings. In any case it shows the client that the change agent is trying to listen.

These first steps in relating to a client might fit in the category of "good politics" or "good public relations." They should not be taken as the substance of change agentry but only as preliminary and sometimes nonessential preliminary niceties. As soon as possible you should start moving toward a serious dialogue on problems. This dialogue might be seen as a series of cycles of problem-solving starting with something small and manageable which the client sees as manifestly urgent. Successful problem-solving at this micro level cements the relationship and builds the trust necessary to move to issues that are more serious, systemic, and controversial.

E. THE IDEAL RELATIONSHIP

Good relationships have no formula and each has its own unique dimensions, but the best seem to have several properties in common. We have identified nine characteristics of a change agent-client relationship that comprise an ideal base from which to launch the innovation process. These nine points do not cover everything and they are not completely independent of one another, but they may give us a yardstick against which we can measure our own circumstances.

1. Reciprocity: The relationship should be one in which both parties are able to give and take. To the extent that there is transfer of information, there should be transfer both ways, from agent to client and client to agent. This reciprocity increases the mutual appreciation of the problem and makes the diagnosis more accurate. One-way relationships tend to breed dependency and inhibit the initiative of the client to help himself.

2. Openness: Openness to new ideas is the sine qua non for innovation. Both the client and the change agent should be willing and ready to receive new inputs from each other. There are several dimensions to openness that should be considered, e.g.: (a) openness to receive new ideas; (b) active eagerness to seek out new ideas; (c) active desire for self-renewal; (d) willingness to share new ideas with others; (e) openness to listen to the problems of others; and (f) openness to give authentic feedback to each other.

3. Realistic Expectations: All too often the client will entertain the belief that the change agent is some sort of miracle worker, and sometimes the change agent will not discourage this view. The client may imagine that enormous benefits will come from the innovation. At later stages of the change process these unrealistic expectations may return to haunt the project, giving undue disillusionment and discouragement to the client and change agent alike. An important rule of change agentry is, therefore, to set reasonably realistic expectations from the outset. Do not oversell yourself or the innovation.

4. Expectations of Reward: The change agent should not, on the other hand, set expectations too low, because it is equally important to give the client some reason for optimism,* an idea of how much better things would be if the innovation were to be successful. The change agent must be seen as providing a valuable resource which will solve problems and provide the client with a significantly improved state of affairs.

   Sometimes it may be necessary to start out the relationship by providing some token to the client of a future reward. Demonstrations or pilot programs sometimes serve this purpose because they show the client what can be done without committing him to major involvement in time and expense. The client needs some tangible evidence that you are a helpful person. If you can provide him with even the smallest bit of such evidence, you will be nurturing the belief that the relationship will be rewarding in the long run as well as the short run.

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*i.e., not false optimism but rather a faith that change is possible and worthwhile.

5. Structure: Successful relationships need to have some structural basis, some definition of roles, working procedures, and expected outcomes. Although under most circumstances it may not be wise to lay out the structure too rigidly or specifically, there should nevertheless be some designation of expected goals and procedures and a meaningful distribution of labor and reward.

   The formalization of structure in the shape of a contract is often advisable, particularly when the change agent sees certain aspects of the relationship as problematic; as, for example, when he has serious cause to doubt the commitment of the leadership of the client system. In any case, such contracts should probably be open-ended on a reciprocal basis. That is, they should specify a sequence of points in the process at which the project could be terminated by mutual consent.*

6. Equal Power: It is difficult to build a successful relationship between parties of grossly unequal power. This is perhaps the overriding consideration in including an outside agent in a change agent team. When the power of the two parties is equivalent, power itself no longer plays the significant role in bringing about change. Where there is an unequal distribution of power the appearance of change may be brought about by the compliance of the weaker partner without the commitment necessary for lasting effectiveness. Under most circumstances, neither the change agent nor the client should have the power to compel the other to do anything.

7. Minimum Threat: The very idea of change is threatening to most of us, particularly when presented to us

*In the following section we will discuss a number of situations in which withdrawal and termination may be desirable.

by an outsider who bills himself as a "change agent."** In most respects most of us like our own world pretty much the way it is, and we look upon changes first as potential disturbances before we see them as potential benefits. It is, therefore, most important that the change agent do all he can to minimize the perception of threat by his client.

8. Confrontation of Differences: The change agent and the client should have the ability to talk out their differences. They need to be able to be frank with one another on critical matters which disturb them about their relationship. Suspicion of hidden motives should be frankly discussed and fears of exploitation brought out in the open. A relationship which tolerates the honest confrontation of differences may be a stormy one at times, but it will also be a healthy one and a strong one when the going gets tough.

9. Involvement of All Relevant Parties: As noted earlier, the change agent must relate not only to the client but also to those others in the community who are most directly influential in the client system. In school settings this usually means the school board and perhaps the local chamber of commerce, the newspapers, and the churches. It is most important that these other relevant parties be involved to a degree, but it is not so easy to decide what degree is appropriate. It seems fair to say, however, that those "others" you have initially identified as highly potent should at least know that you are there, know why you are there, and approve to some degree of your being there.

There are probably very few change agent-client relationships which will live up to all of these nine criteria. One must usually settle for less than the ideal. Nevertheless, it is well to keep these nine points in mind in making the best of what you have. Be aware of where you are weak and how you can change if the opportunity arises.

F. DANGER SIGNALS

At best the change relationship can be an exciting and rewarding experience, but there can be times when it degenerates into

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**The expression "change agent" is used in the Guide because it is descriptive of a certain functional role in education, but the words themselves may not be the best ones to use in explaining your role to clients.

a stagnant and meaningless exercise which produces only frustration and disappointment. Sometimes, you may feel that you have to go ahead with a project regardless of an unpromising relationship. However, there are other times when it is really important for you to question whether to start at all. Below, we have listed a few circumstances which should tip you off to the existence of a bad relationship and a probable failure of your change effort.

1. A Long History of Unresponsiveness to Change: If the client is persistently indifferent, showing no interest either in changing himself or in accepting innovations of any sort, then there is probably little point in expending much energy trying to help him. "Interest," of course, is sometimes hard to measure and you should not assume that the first try will be greeted with enthusiasm. Nevertheless, even though the change agent may view his talents as unique and his ability to bring about change as impressive, he would do well to study the past history of his prospectve client in dealing with similar change efforts. If the system has persistently responded to change efforts with indifference or rejection, it is probably a signal that the system is a poor bet for future efforts.

2. The Client Wants to Use You as a Pawn: Sometimes a client will be eager to seek outside agents only to serve his special purposes in an internal power struggle. The change agent should be very wary of this common type of exploitation.*

3. The Client Is Already Committed to a Particular Position: Sometimes a client will be eager to enlist the support of a change agent only to help him prove a point or to affirm a position to which he is already committed. Under such circumstances there is little opportunity for genuine reciprocity and genuine innovation in the client system.

4. The Client is Powerless in His Own House: Sometimes a client will be eager to invite a change agent into the system and will be open to his ideas and wholeheartedly committed to cooperation, even though he has

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*In rare instances, on the other hand, if he is an opportunist and has his eyes wide open, he may be able to exploit such a situation to his own advantage.

no real power to effect change in his own situation. Some client systems, for example, will be completely dominated by a remote and inaccessible leadership which is fundamentally hostile to change, though it may allow a certain degree of latitude to the membership to "play games." This pattern is frequently found in bureaucratic business organizations controlled by conservative boards of directors or school districts controlled ultimately by conservative school boards.

5. The Client Shows Many Signs of Pathology or Major Incapacity: Change agents should learn to recognize certain signs of pathology in a client system which will make a continuing relationship difficult or impossible. Among such signs might be excessive rigidity or obsessive concern with particular kinds of issues, an excessive tendency to externalize conflicts and to see issues in rigidly black-and-white terms. The system may also suffer from some sort of incapacity, such as an inability to effectively assemble resources when needed, to communicate clearly, to assemble key members for important meetings, and to provide financial and administrative backup for inside members of the change team. Regrettably such signs of incapacity may only reveal themselves long after the project is underway. However, if such signs do appear in large number in very early stages, it may signal to the change agent that his efforts will be wasted. On the other hand, no single one of these signs would necessarily indicate a "no-go" situation. Indeed, various signs of pathology and incapacity may be singled out by the change agent as targets for change effort.

6. The Client Makes a Negative Response to a Well-Managed Initial Encounter Effort: The initial encounter is partly a test of the client as well as the change agent. If the change agent feels he has done everything right in presenting himself as "friendly," "familiar," "rewarding," and "responsive" but is then greeted with hostility or indifference, this may bode ill for the future. On the other hand, the change agent should be very cautious in drawing such a conclusion. Sometimes a tough exterior is simply one of the client's norms in dealing with initial encounters. It is important to assess the true feelings of the client, which may be at variance with outward appearances.

G. HOW TO SIZE UP YOUR RELATIONSHIP

In this chapter we have tried to identify the major facts that should be considered by the change agent in establishing a good relationship with his client. We recognize, however, that most of the readers of this manual will already be committed to various types of relationships which exhibit varying degrees of stability. For such readers to make maximum use of the material presented here, they might ask themselves five questions which would help them size up their present circumstances and give cues as to how they might improve them.

1. Have you managed to build an inside-outside team? This is perhaps the most important single building block of effective linking to the client system.
2. Have you worked out a strategy for initial encounters? Does it include friendliness, familiarity, reward, and responsiveness?
3. Can you identify in your situation the nine features we have listed as dimensions of the ideal relationship? Can you rate where you stand on each of these nine dimensions?
4. Do you suspect that you have any of the danger signals which have been listed above? If you suspect that they are present, can you mitigate their effects? Alternatively can you exit gracefully if the necessity arises?
5. If you are in the midst of an on-going relationship are you doing all that you can to protect and maintain that relationship? Maintenance is far easier and far less expensive than rebuilding.

Unquestionably the successful relationship is the key to successful planned change. We hope that this chapter has provided a useful introduction to the essential features which make up such a successful relationship. We recognize, however, that the chapter cannot stand alone. A good relationship continues to build as it goes along. It will be strengthened by a successful collaborative effort in diagnosis and resource acquisition, and in selecting and installing the innovation. It will also be heavily dependent upon the personality and the skill of the change agent himself and upon how clearly and adequately he has defined his own role.

Building Relationships with a Consultee Institution - an excerpt

Gerald Caplan

THE CONSULTATION CONTRACT

It has become customary to use the term "consultation contract" for the agreement between the consultant and consultees about their complementary roles. This term has the disadvantage of implying the existence of a legal document, which is rarely the case; but it does emphasize an issue of importance, namely that there has to be negotiation between consultant and consultees that leads to a formal or informal agreement, involving sanctioned mutual behavior and some sort of exchange of goods or services. The use of the term also emphasizes the need not only for the initial negotiation of an agreement but also for renegotiations to change the terms of the agreement, when the situation of the two parties alters with the passage of time.

Obtaining Sanction

Initial sanction for the entry of the consultant into the consultee institution is obtained from the director or one of his representatives. This has already been mentioned. As the consultant develops his successive roles he must take care to obtain sanction for his operations also from people in the intermediate layers of the authority hierarchy of the institution down to and including the line workers with whom he will be working. For instance, in a school in which he will be working with classroom teachers to help with problem children, he should clarify what he will be doing, not only with the principal, but also with the vice-principal and the educational supervisors, as well as with the teachers' group. All these people must understand the nature of his activities and agree in general with his goals and methods. If he misses people in any of the

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layers, he is likely to run into difficulty, because they may undermine his program overtly or covertly. Of particular importance is the sanction of the middle management or supervisory group. They are usually in a position to exert a great deal of influence on the line workers, and their support is essential in the development of a smoothly running program.

Obtaining sanction is essentially a simple matter, once the consultant has explicitly recognized that he needs to do it. Usually all that is necessary, in addition to his general activities in arousing trust and respect, is for him to go from one person or group to another in the system, as he learns about their needs and works out what he is able and willing to do to satisfy them, and explore with them whether what he has in mind seems sensible to them. He also elicits their reactions and suggestions for modification, so that he, in effect, gives them a hand in molding his program to suit their perceptions of their work problems and of the ways in which he can be most helpful. What emerges then is a joint plan, or rather a series of successive modifications of the joint plan, as he discusses it with the various workers and authority figures concerned. Eventually, when the details of the plan have been worked out, all the relevant people have been involved and know about them. They have all had an opportunity to modify them and therefore have a personal commitment to supporting the plan.

It is clear that this type of careful layered working through may be time consuming. It should not be hurried. The consultant should allow time for the people in different positions in the institution to consider the implications of his operations for their own work, and to think out ways in which he can best help them or their peers and subordinates in the social system without interfering too much with their traditional ways of managing their affairs. The introduction of a new person into a system invariably involves some disruption. This cautious approach minimizes the latter and provides an opportunity for the integration of the consultant's efforts into the existing problem-solving system of the institution.

Content of the Contract

In addition to its sanction of his operations in general, the contract must specifiy what those operations must be and also must spell out or imply the details of that exchange between the two parties which is the basis of all contracts.

In the early stages of the consultant's work in an institution, both sides may have only vague ideas about these issues. The contract at that time will mirror this by stating that the mental health specialist and the staff of the insitituion are engaging in explorations to see whether they can work out mutually acceptable goals and methods of collaboration. Such a contract may not be in writing or be formalized but may be implicit in the discussions between the would-be consultant and the potential consultees. I have found it advantageous, even in these early stages, to make this type of agreement explicit, and to emphasize that I expect the exploratory phase to lead to concrete findings that will eventually be included in a new agreement between the parties concerned.

As a result of my experience, I have also come to the conclusion that as early as possible, and certainly as soon as clear details of complementary roles begin to emerge, it is advantageous to begin formulating the contract in writing. This does not have to be a formal document. Usually it takes the form of an exchange of letters. The written word is an excellent way of revealing misunderstandings, which may be obscured in verbal discussions. It is important that these be corrected as early as possible in order to arrive at true consensus.

These letters should specify how often and for how long the consultant will visit; how potential consultees will communicate with him; the type of cases that it is appropriate to discuss with him; the kind of consultation to be involved (that is, case consultation and/or administrative consultation, client-centered and/or consultee-centered); what help he will offer (that is, advice, referral, collaboration or not, enlargement of the consultee's understanding, etc.); and the nature and limits of confidentiality. The contract should also specify what the consultant will not do-for example, psychotherapy for personal problems of consultees, discussion of intrastaff problems such as relationships of line workers and supervisors, intervention in staff conflicts, etc. It should also specify in what way the consultant and his agency will benefit from the program-for example, the amount and type of payment; or if no direct payment is involved, the professional rewards, such as the contribution of the consultee group to the achievement of the consultant's mission of promoting mental health or reducing the incidence of mental disorder in the population for whose well-being he has some responsibility.

Renegotiation of Sanction and Content of Contract

It is clear from what has already been said that the negotiation of the initial contract takes the form of a series of steps involving a number of successive approximations to an eventual stable agreement between the parties concerned. It is important to emphasize that this agreement may not be very stable but should be expected to change with the passage of time and because of various types of alteration in the situation both of the consultant and the consultee agencies and of the community of which they operate.

The term "consultation contract" may obscure this, because most legal contracts usually have greater stability and can be relied upon not to change for long periods, even though it is recognized that occasionally they may need review and modification.

Consultants should always write into the contract a clause dealing with systematic review and revision-for example, that the parties should meet once a year to evaluate the consultation program and suggest improvements in the terms of the agreement.

In addition, the consultant should be alert to the need to conduct such a review when unexpected changes take place in the policies of his own organization or in the program or personnel of the consultee institution. It is particularly important to initiate such a review if there is a change in any of the key posts of the consultee institution which may affect the sanction of the consultation program-for example, a change of school principal or a change of nursing supervisor in a public health agency. On such occasions, it is rarely wise to rely on the new officeholder's being adequately briefed about the program by his predecessor and, more significant, on his being in full agreement with the terms of a contract, in the gradual formulation of which he was not involved. Instead, the consultant should realize that he must start almost from the beginning to negotiate sanction with the new man and to involve him in a major review and possibly a detailed reformulation of the content of the contract. The goal of this is that the new man should feel that this is a program which he has had a chance to mold and to which he can wholeheartedly commit himself, rather than somebody else's project that he has inherited.

Sanction Maintenance

In addition to these systematic and situationally determined renegotiations of the contract with those members of staff of the consultee institution who are directly involved with the program, the consultant must also ensure that signficant figures of power and influence higher up in the system of which the institution is part, or in positions of influence in the community, are continually kept informed of his operations and are stimulated to support him. These people are usually very busy and the consultant should not annoy them by intruding unduly on their time; but every once in a while he should seize an appropriate opportunity to send them a copy of a short report about the consultation program or to visit them for an informal chat about his work, so that they may keep abreast of his progress and have a chance to make explicit their support. This should lead to such a situation, for instance, that when the local superintendent of schools, or the chairman of the board of education, is at a banquet and the lady sitting next to him tells him that she has heard disquieting reports that a psychologist from the local community mental health center is carrying out some kind of mysterious investigation on the mental health of students, he can immediately and comfortably reply that he knows all about the program and there is nothing mysterious about it-that in fact the psychologist's visits are part of an excellent modern program to promote the mental health of children by providing specialist support to teachers and school principals, and that he is very proud of it. An effective superintendent of schools would probably make this kind of response in any case, but the consultant should ensure that he has visited him sufficiently recently and has kept him well enough informed of the developments in his program that the superintendent feels quite confident that all is well and does not need to check on the program immediately when he gets to the office next day.

COMMON METHODOLOGICAL ISSUES

The following methodological issues are frequently encountered by consultants engaged in buiding relationships in consultee institutions:

Ensuring Adequate Communication of the Contract to Consultees

The consultant can rarely rely on the communication network of the consultee institution to convey undistorted messages about the details of the contract to all members of its staff. He should therefore take every opportunity to clarify and confirm the essential points himself, particulary those which are emotionally complicated. This means that he should gladly accept all opportunities offered to him to talk to groups of the staff, and, whatever the topic of the meeting, mention the points he has in mind as supplements or asides to his scheduled remarks. He should also repeat them over and over again whenever he is talking to individual staff members. For instance, he should repeatedly tell them that consultation deals only with work difficulties and never with private personal issues of the consultee, that the consultation discussions are confidential, that he will not carry messages or in any other way intervene or take sides in differences of opinion among staff members, and (if the contract includes consultee-centered consultation) that the help the staff can expect from him will lead to enlarging and deepening their understanding of the psychological aspects of their clients so that they and their supervisors can develop more effective ways of handling their work problems.

Dealing with Status Problems

The goal of relationship building is to achieve a coordinate or non-hierarchical relationship with the consultees, so that they will not be forced or feel coerced to accept what the consultant says just because he says it. Since they will be free to accept or reject, they will quickly and without dependency tensions be able to take as their own any ideas that make sense to them within the framework of their own conceptual and value systems. This desirable situation is achieved by the consultant's behaving in a noncoercive and respectful way and by various techniques that will be discussed in the next chapter. But the development of such a coordinate relationship will be obstructed if in fact the consultee has very low status in the consultee organization while the consultant is a senior member of staff of the consulting agency-for instance, if the psychiatric director of the community mental health program offers consultation to a junior nurse's aide or a student teacher. When this happens, the consultant must take special steps in the consultation interaction to "divest himself of rank."

This is particularly difficult if the consultant and consultee are respectively senior and junior members of the same profession. When this is the case, it is very hard for the consultee not to see the consultant as a role model and to feel compelled to do whatsoever he says, despite being admonished to feel free to reject any part of the consultant's statements.

The best way of handling this problem is to avoid it, by taking care to appoint a consultant who is of a different profession from the majority of staff members of the consultee institution.

Another common status difficulty which complicates the task of relationship building and contract negotiation arises when the would-be consultant is of obviously lower status than the authority figures in the consultee institution-for instance, when a junior social worker attempts to negotiate a contract with the superintendent of schools. A useful way of dealing with this is for a senior member of the consultant organization to open the negotiations with the authority figure and, after the initial phases, for him to introduce the junior staff member as his personal representative, upon whom, as it were, he confers his own power and status. In dealing with a large organization, it may be necessary for negotiations to be carried out at a variety of levels in the consultee hierarchy by representatives of the component levels of the consultant ladder of rank. In an army mental hygiene service, for instance, the psychiatric director, who is a major, will negotiate with the general commanding the camp; the social worker, who is a lieutenant, will negotiate with the captain who commands a unit; and the enlisted man social work technician will negotiate with the noncommissioned officers of a company. After the initial contacts, it may be possible for some of the negotiation to be delegated to lower status representatives, but there are obvious limits to this-the general is not likely to take kindly to negotiating a consultation contract with an enlisted man. Although the army is an extreme example, this principle also holds in less hierarchical settings. There must be a culturally acceptable consonance between the rank of parties to a negotiation in order to allow relatively free communication.

Resistance to Consultation as a Publicly Visible Sign of Professional Inadequacy

In many potential consultee institutions the development of a consultation program is hindered by the attitude that when a staff worker asks for consultation this is an admission of professional incompetence. This would be the case especially with regard to consultee-centered consultation. The way this problem has often been successfully overcome is for the consultant to emphasize that consultation deals with cases in which the problems of clients are complicated, unclear, and confusing, rather than using the formulation that consultation seeks to help consultees who are confused about their clients.

The first formulation allows the consultant to educate the staff of the consultee institution to the realization that for them to recognize clients whose problems are particularly complex demands professional sophistication in mental health matters. This makes the identification of a case as appropriate for consultation a sign of professional merit, instead of inadequacy.

This message must be directed by the consultant to the power and influence figures of the institution, particularly the supervisory group. If they accept the formulation and its associated value judgment, they will set the pattern for the rest of the staff.

STAGE 2

DEFINING THE PROBLEM

- Identifying data needs and sources
- Assessing program needs
- Developing a problem statement

The linking agent begins working with a school or district because it has a problem, a need. However, when school personnel are asked to describe the nature of the problem, they frequently do so in general terms, e.g., "The students don't know how to write", or in terms of a solution, e.g., "We need programs for gifted children." The problem will differ depending on who explains it or what kind of data is examined. Careful definition of the problem is the first important step toward change. Problem definition is difficult, tedious, and time-consuming, but the quality of the solution(s) depends on the quality of the problem definition.

Identifying data needs and sources

The first step in defining the problem is to collect data about the nature and severity of the problem. Working with the school personnel, the linking agent determines what types of data are needed -- student attitudinal or achievement test results, teacher interview data, cost effectiveness information, and follow up on placement information. To many people, "data" means numbers or test scores. But test scores are only one kind of student achievement data. Other sources are teacher assessments or student performance indicators (i.e., writing samples, books read). Information other than student achievement data is helpful; examples are perceptions of teachers, administrators, specialists, or behavior and attitude information.

Once it is determined what kind of information is needed, it must be decided where to get it. Standardized test results are almost always available. Sometimes there are reports of prior assessment by the district office or a statewide process. New information can be gathered for this particular effort, but it is helpful to build on what is available. Deciding where to collect data involves not only deciding what information is available, but also which groups are valuable data resources, including teachers, students, parents, community agencies, employers, and state department of education personnel.

Assessing program needs

After identifying sources of data, a needs assessment plan can be developed and carried out. Interviews, surveys, classroom observations, and meetings of representative people are some strategies to consider. The linking agent and others involved should determine the best people to gather specific kinds of information. For example, in some schools classroom observations may best be done by an objective outsider while in other schools peer teachers who are trusted might elicit the best information if done by a peer teacher. There are no universal rules for deciding who are the best people to collect the data; the decision will depend on the local situation. In addition to what information will be gathered and who will do it, the needs assessment plan should include a time line indicating when each type of information will be collected.

Next, the collected information must be analyzed. Data from different sources should be compared and the validity of the results analyzed in relation to the linking agent's knowledge of the identified problem.

Developing a problem statement

When the needs have been assessed, the results should be analyzed carefully and developed into a written report of the identified problem in the school or district. Sometimes this analysis is done by the linking agent who then prepares a report. This report can be shared with a group representative of different constituencies within the school community -- teachers, administrators, parents, etc. -- to analyze the data and to use their different viewpoints to develop a common understanding of the school's needs. The working group discussed in the previous stage may serve this function. However the analysis is performed, the linking agent should develop a plan for checking the initial results of the needs assessment with various people within the school or district and should include their reaction in the report.

A written report of the problem permits a formal check for consensus. Do people agree that this is the problem? The statement can be used as a check throughout the improvement process and as a starting point for setting goals for each stage of the change effort.

Introduction to Analyzing Problems

J. Gall, L. York, and R. Hertzberg

I. THE PROCESS OF ANALYZING PROBLEMS

Numerous problems face the nation's schools today. These problems differ widely in their content, in their scope, in the types of people to whom they are important, and in the intensity with which people complain about them. Some of them may be extremely serious concerns which will result in great setbacks in the educational opportunities that the schools provide children unless time and money are allocated for their solution. Other problems, even though the subject of frequent complaints, may not be as serious as some of those with which they compete for resources. And still other problems may not even be valid for some school districts, despite complaints. Regardless of the perplexity which such a profusion of problems creates, many schools try to pinpoint causes of these problems and look for solutions to them before the problems themselves are well understood. How can instructional planners rationally determine which of the many problems that they face most deserve their attention?

This training unit presents a systematic approach to the process of analyzing instructional problems. It will take you through a series of steps or decision points by which you can analyze problems in your own school situation.

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II. HOW ANALYZING PROBLEMS CAN HELP THE SCHOOLS

Systematically analyzing the problems that schools encounter is naturally more time consuming than using one's subjective judgment to decide whether to deal with them, but it results in a number of benefits for the schools:

Consideration of implications for student outcome. The ultimate outcomes of education are, of course, what students learn. Problem analysis helps school people define their problems so that the implications for student outcome are clearly specified. This means that the priorities set for dealing with problems will correspond to those student outcomes which are most in need of improvement.

Informed decision making. Often the information that comes to instructional planners about alleged problems is quite sketchy, and making decisions about those problems consequently involves a good deal of guesswork. Problem analysis ensures that those responsible have a sufficient information base from which to decide whether to take action on certain problems. And if the problems have been clearly defined and analyzed, deciding among alternative solutions is greatly simplified.

Assurance that the most serious problems are acted on first. In order to present the assigning of arbitrary or biased priorities, school decision makers should analyze problems to assess the relative seriousness of problems that are competing for resources. This ensures that the schools will deal with serious problems before dealing with minor problems.

Derivation of instructional goals and objectives. Analyzing problems provides school planners with a basis from which to derive appropriate goals and objectives for their instructional program, and to assign priorities to them on the basis of their relevance to serious problems in the district.

As you proceed through this training course, you will have an opportunity to learn more about, and to apply, the steps of analyzing problems. Once you have a clear idea what the process involves and what benefits it can offer schools, you may recognize the desirability of carefully analyzing problems as one basis for determining the instructional purposes of your schools.

III. IDENTIFICATION OF PROBLEM SIGNALS

A problem signal is any message which indicates the existence of a problem. A problem signal may be formal or informal, simple or complicated, concerned with only one classroom or district, or related to the nation's entire school system. A signal may be a comment, conversation, report, or news article. A 500-page report on marijuana smoking among teen-age youth by a Presidential Commission on Drug Abuse; a group of secondary science teachers meeting to propose courses on the psychological, historical, and chemical aspects of marijuana to increase the relevance of their curriculum; or the local police chief stating in a news interview that increasing numbers of students in the district are being arrested for use, possession, and sale of marijuana, are all examples of problem signals.

Many signals are communicated in written form, ranging from a hastily scrawled note between colleagues to the findings of a well-documented, long-term research study. Other signals result from telephone conversations, interviews, meetings, discussion groups, or informal gatherings. Signals often originate from sources outside the school context, as well as within it. Examples of external sources are community action groups, ad hoc committees, the Chamber of Commerce, congressmen, university faculty members, or professional associations and journals.

Since an instructional planner cannot have daily contact with all school-related groups and individuals, many problem signals come to him indirectly through personnel of individual school sites. Adequate communication among district personnel is then a critcal factor in analyzing problems, since it affects the accuracy of information received from both within and without the school system.

IV. CLASSIFYING PROBLEM SIGNALS

Problem signals should be classified or organized to help you discriminate among recurrent complaints or suggestions and isolated criticisms. Signals may be recorded verbatim, or summarized. Classifying is a difficult task because, in a sense, every problem may be ultimately related to everything else in the school context. To lump all problem signals together, however, would not help define existing problems, nor would it give direction to further analysis and solution.

The classification of problem signals into categories requires an initial decision about the nature and extent of the signalled problems. Classification is the organization of problem signals that may be related to each other in any of a number of ways. This organization provides initial, tentative specifications of the problems that have been signalled.

Consider the following problem signals:

1. A parent complains about outmoded teaching methods and materials being used in her seventh-grade son's reading program.

2. A group of local law enforcement officials states that students are not being informed about the dangers of drug use by their schools.

3. A high school counselor says that students are receiving inadequate guidance about such matters as dating, morality, marital planning, illegitimate pregnancies, and venereal diseases.

4. A meeting of Lowell High School teachers discusses the need to involve teachers more meaningfully in decisions concerning a newly implemented counselling program for drug users at the school.

5. The assistant director of the City Health Department states that the use of tobacco, alcohol, and other drugs is widespread among secondary level students.

6. The incidence of illegitimate births, VD, forced marriages, and divorce among young people has been rising rapidly over the past five years, according to an article in the local newspaper.

7. Newly released results of district-wide standardized reading achievement tests show that many of the district's secondary students are reading two to four years below grade level.

8. High school counselors reported to the School Board that they feel insufficiently informed about the nature and effects of various drugs to provide proper guidance and counselling to students with drug problems.

9. A spokesman for a parents' group says at a School Board meeting that the schools must assume the responsibility for the transmission of accurate information about human reproduction and sexual behavior to young people because other groups are failing to do so.

Probably the best single basis for classification of these problem signals is to ask: "What aspects of school operation or areas of student outcome do the signals concern?" The nine signals above refer to three areas of student outcome that serve as useful categories for classifying them:

1. Reading (signals 1 and 7).
2. Education and guidance concerning drug abuse (signals 2, 4, 5, and 8).
3. Student knowledge and behavior in the area of sex and family life (signals 3, 6, and 9).

Alternatively, in some situations you might classify the problem signals according to such factors as the particular groups of student, or grade levels, to which the signals refer.

V. WHAT PROBLEMS DO THE SIGNALS IMPLY?

A. Defining Student Outcome Problems

In a recent opinion survey, the following instructional problems were identified as being most in need of attention from the schools:

1. Improvement of self-concept.
2. Provision of specialized programs for the disadvantaged.
3. A cultural arts program.
4. An increase in motivation conducive to learning.
5. Vocational training and career information.
6. An increase in learning how to learn.

Do you understand in each case what the student outcome problem is? Do you know what is happening presently? Do you know what is desired? Even if you think you do understand what the problems are, would another person reading this list get the same meaning from it? Probably not, because none of these problems is clearly defined. Yet it is very common for people to communicate about "problems" in such unclear terms.

First of all, let's clarify what is meant by a "problem." A student outcome problem is defined as a valid discrepancy between an existing state of student outcome and the desired state of that outcome. The term "existing state" refers to the actual or present level of a particular student outcome; the term "desired state" refers to the sought-for or intended level. When you define the problem implied by a group of problem signals you have receive, you should specify the unsatisfactory student outcome that the problem signals allege presently exists among students in your schools, as well as the corresponding student outcome that the problem signals imply would be more satisfactory.

Desired states are generally phrased as either goals or objectives for student performance. In fact, a district's goal statement is one of the best sources from which to derive "desired states." Information gathered during the process of analyzing prblems can later be used to reexamine and revise the goal statement.

In most cases, it is not advisable to phrase the desired state in terms of the ideal, or maximum possible level of student outcome. For example, if the problem of student drop-out rate were being analyzed, a desired state of zero drop-outs would represent the ideal level. However, it would be unreasonable to set the desired state this high, because it implies that anything short of perfection would not be satisfactory.

Conditions external to the school program will always influence the level of student outcomes. Students who transfer into your district may not achieve the desired state of a particular student outcome simply because they have not been previously involved in the instructional program of your district. It is better to specify as the desired state that level of student outcome which school-related groups would consider satisfactory or acceptable.

The more explicitly you define problems, the more likely it is that someone else reading your problem statement will get the same impression of the problem that you are trying to communicate. Here are somme suggested criteria for defining existing and desired states of student outcome that will help you to write explicit problem statements:

1. SPECIFY THE CURRICULAR OR INSTRUCTION AREA INVOLVED.

2. SPECIFY THE GRADE LEVELS OF THE STUDENTS INVOLVED.

3. SPECIFY PARTICULAR STUDENT GROUPS INVOLVED.

4. SPECIFY THE STUDENT BEHAVIORS INVOLVED.

If your definition of a problem meets all four of these criteria, people who read or hear your problem statement will have a fairly clear idea of the problem to which you are referring. Sometime the problem signals that you receive will not provide sufficient information for you to write problem statements that satisfy all these criteria. Problem definitions based on the initial problem signals received should be regarded as only tentative. You will generally be able to redefine problems more adequately after you have collect additional information about them.

Here are some examples of problem statments that specify existing and desired states of student outcome in terms that meet the criteria for well-defined problems:

Existing State: Our district overemphasizes academic preparation, even though the majority of our students do not plan to go on to college but are instead concerned with being prepared for the world of work. Our high school students who seek jobs upon graduation are lacking in skills that would qualify them for obtaining and holding a job.

Desired State: Our non-college-bound high school students should receive better preparation for getting a job, through vocational training courses that keep abreast of changing manpower needs.

Existing State: Elementary students who cannot read as well as their classmates are not getting sufficient special help to increase their reading skills. By the time they complete the elementary grades, their reading achievement scores have fallen approximately two-and-a-half years below grade level.

Desired State: Elementary students who are low achievers in reading, that is, their scores on district-wide standardized reading achievement tests fall within the lowest quartile, need special reading instruction. These students should be excused from some of their class activities in order to devote longer, concentrated periods of time to upgrading their reading skills.

B. Proper Scale of Problem Definitions

The final step in the process of analyzing problems will require you to make decisions about which of the problems that face your schools are the most serious. These decisions will be easier to make if all the problems that you have defined are of a similar scale or level of specificity, so that comparisons among them are possible. When you define the problem represented by a group of related problem signals, avoid stating the problem in overly broad or overly specific terms.

Generally, instructional concerns like "vocational education," "low-ability students," or "family like education" should not be treated as "problems" because they are too broad to permit careful analysis. Such statements represent broad school concerns within which several specific student outcome problems may exist.

You should also avoid defining very narrow problems, such as specific incidents of student dissent or vandalism, because such incidents do not necessarily refer to problems of district-wide or long-range concern. Often, such specific incidents are merely symptoms of more general outcome problems that may deserve attention.

What are the advantages of not defining problems too broadly or too narrowly?

1. You will know which aspects of a general problem area to investigate. It may turn out that people complaining about "the inadequate science program actually mean "students need to learn more about ecology, " whereas other aspects of a science program, such as "opportunities to experiment with scientific phenomena" may be concerning them. Problem statements should be specific enough to provide guidance in setting objectives and selecting programs to solve the instructional problems. On the other hand, specific complaints such as "student loitering in the washrooms" should be considered part of a larger problem, for example, "poor classroom attendance."

2. Although various problems within a broad area might be interrelated, they may not all be valid problems for your particular school district. Within the problem area "the science program," for example, you might find that students already have sufficient opportunity to experiment with scientific phenomena. However, they may not be learning important scientific concepts and they may not be learning much about ecology. If you define the specific problems within the broad problem area, you can determine which ones are valid for your district and which are not.

3. Within a broad problem area, certain problems may be more serious than others. Consider the example "student attitudes toward school." Your community may feel that it is desirable for students to like their

teachers, but absolutely critical that they value academic achievement. If you had defined the problem without distinguishing these two separate aspects, you might have concluded that this problem is "somewhat serious," when in fact it includes one problem that is critical and another of lesser seriousness.

4. It may be feasible to solve certain problems within a broad problem area, but not others. Attempting to solve all the problems in an area such as science may be too expensive for a school district. For example, giving high school students an opportunity to experiment with scientific phenomena might not be feasible if it required building special science laboratories. If the science problem had been viewed as necessarily involving "experimenting with scientific phenomena," the district might soon have concluded that this was not a feasible problem for it to solve. If however, the school district had separately considered "understanding of scientific concepts," it might have concluded that this problem was feasible for the schools to tackle even though other problems in the area of science were not.

C. Inferring Student Outcome Problems from Problem Signals Stated in Terms of Causes or Solutions

Very often the existing and desired states of student outcome will not be explicitly cited in the problem signals you recieve, but must be inferred from them. Problem signals may specify some of the factors that contribute to a problem (causes) or some of the possibilities for trying to alleviate it (solutions) rather than the particular student outcomes themselves. However, problem definitions should not simply specify the most likely cause of the problem or the most promising solution. Well-defined problem statements must indicate the existing and desired levels of a partcular student outcome, so that the discrepancy between them can eventually be validated.

The tendecy to jump to specifying solutions at this stage is common. School people face many problems and, consequently, often complain, "Don't just tell me what's wrong, tell me what to do about it!" This is a legitimate request. However, proposals for instructional improvements often do not make it clear what problems they will help to solve. Many people have strong biases for particular solutions and will readily advocate them for almost any problem. Likewise, certain innovations create a "bandwagon effect," that is, an innovation that has worked well in some schools will be readily adopted by other school districts, even though the problem for which it is an appropriate solution may not be a problem that these other school districts have.

Here are some examples of "problems" which are really "solutions in disguise":

Our schools need a reduced pupil-teacher ratio.

Our schools need differentiated staffing.

Our schools need more money.

Our schools need better communication with the community.

Our schools need individualized instruction.

Or, even more specifically:

Our schools need Individually Prescribed Instruction[1] (a particular program for individualizing instruction).

Our schools need Minicourses (a particular kind of teacher training program).

Our schools need Science Curriculum Improvement Study[2] (a particular science program).

Under certain conditions, one of these solutions might be exactly what the school district needs to solve its problem(s). Unfortunately, it is impossible to determine the merits of proposed solutions unless the problem(s) they are meant to solve have been clearly specified.

Here is an example which illustrates the usefulness of specifying the problem before you specify a solution you think desirable:

Mr. Carlton, the superintendent of a small unified school district in the Midwest, attends a conference in which Individually Prescribed Instruction (IPI) is described. He is eager to individualize instruction in his district and also to improve the math program. He states his problem as:

"Our district needs to adopt the IPI math program."

When he begins to estimate the feasibility of solving this problem, i.e., the feasibility of adopting IPI, he discovers that the cost per student for IPI math is ten times the cost of the present math program. Unhappily he concludes that, until some extra money comes his way, he has a problem that cannot be solved.

However, Mr. Carlton might have stated his problem as:

"We want to increase student achievement in math."

Then a variety of solutions, including but not limited to IPI math, would be applicable. Or he might have stated the problem so that a particular class or type of solution was implied, e.g.,

"We want to increase student achievement in math by allowing each child to proceed at his own pace and with individualized assistance where needed."

In this case, too, he is not limited to one solution. There may be a whole range of programs for individualizing instruction in mathematics, some less expensive than others. Or there may be techniques by which teachers can provide individualized instruction within the conventional classroom setting. For example, the Minicourse "Individualizing Instruction in Mathematics"[3] trains teachers in techniques by which they can provide more indivdual attention to students having math problems with changing the instructional materials or class size.

Viewed in this way, Mr. Carlton's problem may be alleviated with a variety of alternative solutions. The value of considering alternatives is that they can be compared on the basis of their cost, their effectiveness, their teacher retraining requirements, staff and community acceptance, and so on. Thus, the danger of stating a problem in terms of a particular solution, or even a particular type of solution, is that you thereby decrease the relevant alternatives to be considered in solving the problem.

A similar reduction of alternatives can occur if problems are stated in terms of causes, rather than existing and desired states of student outcome. Consider the following example:

Several administrative staff members of an urban school district are discussing the poor reading skills of many Black children in their district. One staff member insists that Black children have not learned to read better because of the prejudice of teachers. He claims, "Even the ones who aren't out-and-out racists just haven't been trained to deal with Black children." Another staff member counters that parents are largely responsible for their children's poor reading ability, because they do not reinforce their children's learning at home. He claims that "there's a lack of reading matter in the home," that "parents don't read to their children," and that "they just don't value academic achievement." A third staff member maintains that the District's reading materials are culturally biased and inappropriate for Black and other minority children. A fourth staff member suggests that the standardized tests used to measure reading achievement are at fault, and that Mexican-American children should be tested in Spanish, Black kids in their dialect, and so on.

Are all four staff members talking about the same problem? At first it does not appear so. However, a concern for the low reading achievement of culturally different children runs through all their comments. If the staff members could all agree that this student outcome is the problem being discussed, they would see that seemingly disparate factors (e.g., racial prejudice of teachers, cultural bias of tests, lack of reading materials in the home) are in fact related, because they are all potential causes of low reading achievement.

Once problems have been defined in terms of the student outcomes involved, school planners can analyze all relevant causal factors, rather than assuming one particular cause and then seeking a solution that is appropriate only to that cause. Most solutions assume certain causes are of primary importance. If school people happen to emphasize the wrong causes of a problem, the solution that they select will probably fail to solve the problem. Therefore, before considering solutions, instructional planners must both analyze the student outcome problems involved and determine the possible causes of those problems.

VI. REDEFINING PROBLEMS

Earlier it was stressed that the initial definition of problems, based only upon problem signals that have been received, should be considered tentative because problem signals alone will rarely provide sufficient information for a well-defined problem statement. Earlier four criteria were suggested for assessing how well a problem has been defined. An adequate problem definition should specify:

1. the curricular or instructional areas involved,
2. the particular student groups affected,
3. the grade levels at which the problem is occurring, and

4. the student behaviors involved.

Now that you have gathered additional information to enable you to judge the validity of problems, you are also better prepared to write problem definitions that will satisfy the four criteria above.

Every problem you have analyzed need not necessarily be redefined. But generally speaking, it is advisable to redefine the problems you judge to be valid to take into account the additional information that has come to your attention as a result of your information collection plan. Especially if the new information collected includes information about one or more of the criteria for well-defined problem statements that was not initially available to you, you should be sure to rewrite the problem definition to include that information.

Problems that you judge to be valid only in part must always be redefined, to eliminate the invalid aspects of the original problem statement. For example, information collected to analyze the validity of a problem involving poor reading ability of minority students may reveal Mexican-American students to be the only ethnic group of students whose performance in reading falls well below grade level. This problem would be judged to be valid only in part, because it is only valid for one particular subgroup (i.e., Mexican-American students) of the larger group allegedly affected according to the initial problem statement (i.e., minority students). The problem should then be redefined to limit its reference to the group involved. Subsequent analysis of potential solutions to this problem can then focus on those solutions particularly relevant to Spanish-speaking students.

[1] Learning Research and Development Center, University of Pittsburgh, and Research for Better Schools, Inc., Philadelphia, PA., Individually Prescribed Instruction. New York: Appleton-Century-Crofts.

[2] Lawrence Hall of Science, University of California, Berkeley, Science Curriculum Improvement Study. Chicago: Rand McNally & Co.

[3] Far West Laboratory for Educational Research and Development, Berkeley, California, Minicourse--Indivualizing Instruction in Mathematics. Beverly Hills, California: Macmillan Education Services, Inc., 1971.

Four Guidelines for Writing a Problem Statement

Charles Jung, Rene Pino, and Ruth Emory

A good problem statement is a brief, specific statement about a problem situation. A problem situation exists when there is a difference between the way things are and the way someone would like them to be. The word "problem" tends to suggest a negative meaning to most of us. The definition used here can be applied to situations which we feel negative about. It also applies to situations that are not thought of as negative ones. The situation might be generally good now and an accomplishment of a new objective could make it even better.

Using the definition of a problem situation as one where there is discrepancy between the way things are now and the way someone would like them to be implies that there are almost always "problems" that could be worked on. There are almost always improvemnt goals in education that we would like to be working toward.

One of the greatest barriers to working constructively toward achieving improvement goals is lack of specificity in stating the problem. Compare the two following efforts to state a problem.

"We have a commmunication problem among our faculty."

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"We use team teaching in our building. Virtually all of us involved in teams are concerned that we haven't given adequate attention to creating ways to share innovative ideas across teams. We need ways of sharing that don't take up the time of those to whom a particular idea is not relevant, but which share enough detail so that those who are interested will know how to try it out in their own setting."

The latter statement covers four points that are suggested as guidelines for writing a good problem statement.

The most important guideline for writing a good problem statement is inclusion of a specific goal for improvement. Two kinds of confusion can arise when you are attempting to describe the goal for improvement in your statement. One relates to the fact that there may be many possible major and minor goals in the problem situation. It might require many, many pages of writing to describe the entire problem situation. Describing the problem situation is not the same as writing a problem statement. A problem statement answers four guideline questions in focusing on one, specific improvement goal within the problem situation.

The second kind of confusion arises from needing to be specific in writing the problem statement, while at the same time being ready to change the statement any time new understanding of the problem situation indicates that you should do so. In the early stages of working on a problem, I may have quite erroneous ideas about what kind of problem it is or what the improvement goals should be. By stating specifically what I think is the case, I'll know what to explore. I will be clear about what to change. The statement should be as specific as possible. but always open to change in the light of new understanding.

Following are the four guidelines to writing a problem statement and some considerations that can help you to be specific when writing one:

1. Who is affected? Consider these possibilities before deciding what you want to say about this. Is it you? Is it one other person? Is it a small group of people? Is it an entire organization? Is it the community or society at large?

2. Who is causing it? We frequently speak of problems as though they were caused by circumstances that didn't related directly to people. This is almost never the case. There is almost always some person or persons who could influence things being different. Consider the same possibilities as above. It is you? Is it one

other person? Is it a small group of people? Is it an entire organization? Is it the community or society at large?

3. What kind of problem is it? There are many ways to classify kinds of problems. The following consideration may prove helpful:

   - There is lack of clarity or disagreement about goals.
   - There is lack of clarity or disagreement about the means of achieving goals.
   - There is a lack of skills needed to carry out a particular means.
   - There is lack of material resources.
   - There is inaccurate communication.
   - There is too little or too much communication.
   - People have a different understanding of the same thing.
   - There is insufficient time or schedules don't coincide.
   - Roles are lacking or inappropriate.
   - Norms are restrictive, unclear, or misinterpreted,
   - There are conflicts of ideology.
   - There is a lack of clarity or a conflict about decision making, e.g., power struggles.
   - Expression of feelings is inappropriate or inadequate.
   - There is conflict related to individual differences.

4. What is the goal for improvement? Ideally, this should be stated so clearly that anyone reading your statement would know how to determine when the goal had been reached. It would tell exactly who would be doing what, where, how and to what extent. Until you know where you are going, it's difficult to make and carry out plans to get there. The more clear you are about your intended target at any given time, the more likely you will be to recognize that it is an incorrect target should this prove to be the case.

PROBLEM STATEMENT

What Kind Of Problem Is It?

Who Is Affected?

How Are They Affected?

Who Or What Is Causing The Problem?

What Is The Goal For Improvement?

Problem-Solving Techniques for Administrators - an excerpt

Norman Hale

UNDERSTANDING A SITUATION: FORCE-FIELD ANALYSIS

Force-field analysis is an especially useful technique in the early stages of problem solving. It provides a graphic means for either one person working alone or many people working together to dissect a problem into its major parts (forces). According to force-field theory, every situation is in a state of "quasi-stationary equilibrium" as the result of a "complex field of forces" that work in "varying directions, at differing strengths. The existing situation, or status quo, is the result of the combination of these forces.

Sanders illustrates the theory pictorially in figure 1. Driving forces are defined as "those which tend to change the existing level or tend to help reach the desired level." Restraining forces are "those which tend to resist change or preserve the status quo."

An alternative illustration of the model is offered by Gaskell in figure 2. In this schema, the vertical line represents the status quo or the "equilibrium" of forces in the situation.

Force-field's view of any situation as a conglomeration of poised forces makes itself especially useful in the analysis of problems. Before making any decision on a course of action, decision-makers must be able to enumerate the various forces, both driving and restraining. Sanders notes that this rigorous analysis reveals that problems are composed of "complex fields of forces and myriad influences rather than single or isolated factors." It helps the administrator to recognize that a single hasty action as the result of a premature decision may

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have no effect on the complex of forces. It may even have an undesirable effect.

The following hypothetical example, which appears in Gaskell, is only one of many applications of the technique. In this situation, a teacher feels a lack of communication in the classroom. The teacher has a goal he defines as the "Open and Active Criticism of Ideas between Us." In an analysis of the situation, the teacher draws a diagram and lists the forces pressing for open criticism and those pushing against it (see figure 3). The forces on the left, if allowed to become dominant, would push toward the goal of open and active criticism between students and instructor. The forces on the right are those that inhibit the attaining of the goal and could result in the complete absence of criticism. Gaskell reminds us that "diagnosis is a continuous part of problem solving" and that the force-field scheme may need to be redone several times to identify the basic factors.

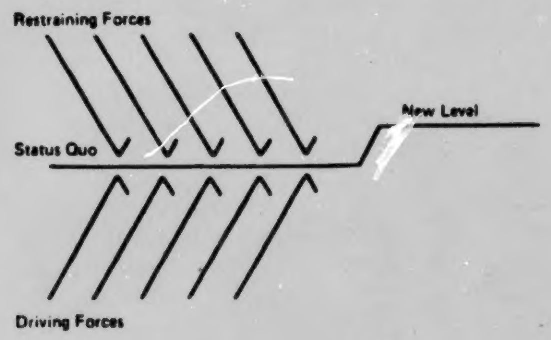

FIGURE 1

Source: Sanders

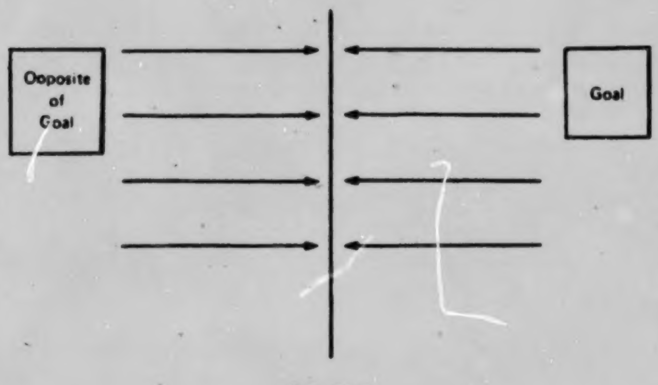

FIGURE 2

Source Gaskell

With the "identification of forces" we have completed the first of what Sanders sees as the four steps in any kind of "decision-making, problem solving, change, or program planning." The second step involves choosing an entry point or "unfreezing" the current situation (see figure 4). A decision is made to strengthen a driving force or to weaken a restraining force in order to move the program in the desired direction. Sanders disagrees with many of the authorities in change strategy who "suggest that a strong unsettling experience is necessary to destroy the equilibrium of the status quo." Sanders believes it is preferable to weaken a restraining force, thereby avoiding severe reaction and disruption.

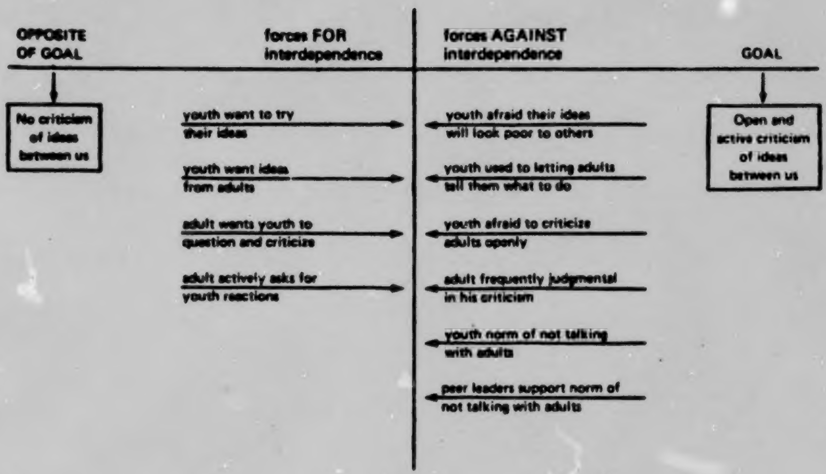
OPPOSITE OF GOAL
forces FOR interdependence
forces AGAINST interdependence
GOAL
No criticism of ideas between us
youth want to try their ideas
youth want ideas from adults
adult wants youth to question and criticize
adult actively asks for youth reactions
youth afraid their ideas will look poor to others
youth used to letting adults tell them what to do
youth afraid to criticize adults openly
adult frequently judgmental in his criticism
youth norm of not talking with adults
peer leaders support norm of not talking with adults
Open and active criticism of ideas between us

FIGURE 3

Source [illegible]

Step three involves "moving to the new level." This movement is the result of a planned combination of strengthening and weakening forces. When the program reaches its new level, it undergoes "refreezing," the fourth step, which requires "planned and organized evaluation and monitoring of the new process." This monitoring assures that inertia will not drag the program back to its old level.

Gaskell recommends that the compilers of the field analysis rate the driving forces on a simple numerical scale in terms of their importance and their ease or difficulty of change Such a ranking system might be of help when making a decision about the entry point.

Force-field's great advantage is its simplicity. The technique can be learned in a single sitting. Yet, as simple as the procedure is, it nonetheless provides an alternative to other "oversimplified systems which see only a single cause and effect." Sanders also points out that it can be used in conjunction with statistics to "any degree of sophistication which may be considered desirable."

Force-field analysis seems particularly useful for current programs that are faltering. Programs for minority students, government-mandated programs, community service programs, vocational programs, and plans for curriculum evaluation and change seem ideally suited to this kind of approach. Unfortunately, making the force-field work is not as easy as Sanders makes it sound. The model offers no practical advice on choosing a point of entry, which is, after all, at the heart of decision-making. It presents little or no advice or help for starting new programs. And it proposes no readily useful means for reaching consensus on the direction of desired action.

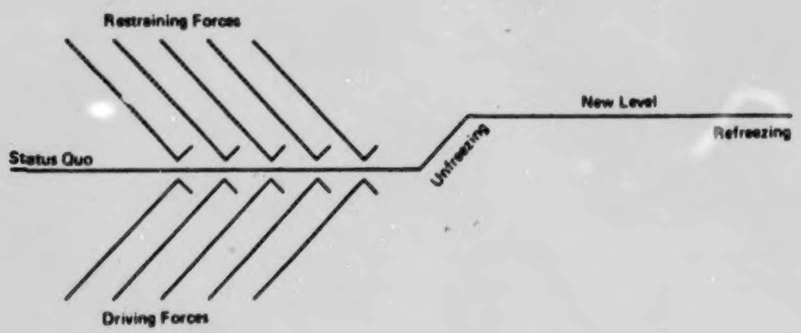

FIGURE 4

Source: Sanders

FINDING SOLUTIONS: THE NOMINAL GROUP TECHNIQUE

Where do solutions to problems come from? Unfortunately force-field analysis does not answer that question. It prescribes no theory or practice for gathering input on possible solutions to a problem. What administrators need, besides an easy method for analyzing problems, is a technique for generating alternative solutions to them.

An Alternative to Interacting Groups

Recent trends in educational management stress the importance of involving management personnel in the decision-making process. The management team, which operates on the theory that persons who are affected by decisions should help make them, is only one innovation making use of this theory. The nominal group technique is another.

The nominal group is the antithesis of the traditional interacting group or ideas session - sometimes known as "brainstorming" - which is often cited as a model of democratic procedure. Brainstorming is characterized by an open exchange among group members in which everyone is encouraged to participate freely. But Van de Ven and Delbecq contend that interacting groups often get stuck on a single topic and merely elaborate on it. Interacting groups reach for decisions before problems are fully aired and are more geared to problem disposal than problem understanding. They also have a regrettable tendency to reinforce certain human weaknesses: people are more comfortable responding to ideas already proposed than they are coming up with new ideas. Verbally proficient members dominate the interacting group. Divergent opinions are often ignored.

To combat these weaknesses, Delbecq and Van de Ven have created a group in which "individuals work in the presence of each other but do not interact."

> Instead, each individual is writing ideas on a pad of paper in front of him. At the end of 10 to 20 minutes, a very structured sharing of ideas takes place. Each individual in round-robin fashion provides one idea from his private list which is written on a flip-chart by a recorder in full view of other members. There is still no discussion, only the recording of privately generated ideas. This round-robin listing continues until each member indicates that he has no further ideas to share. The output of this nominal process is the total set created by this structured process.

Only after all aspects of the problem are explored does the process of ranking the ideas in order of their importance begin.

How effective is the nominal group? Van de Ven and Delbecq cite studies showing that in terms of the "mean number of ideas," "the mean total number of ideas produced," and the "quality of ideas produced," the nominal groups were found to be "significantly superior to brainstorming in generating information relevant to a problem."

There are many reasons for this superiority. Because it avoids dominance by one individual, the procedure encourages the expression of divergent and incompatible ideas. It "stimulates creative tension by means of the presence of others, the silence, and the evidence of activity." It induces a sense of responsibility in all the members and encourages the expression of minority ideas. Such an organization of activity causes the group to "perceive the task with an attitude of 'problem-mindedness' as opposed to 'solution-mindedness'."

The nominal group can be used not only to identify problems but to provide solutions as well. In the first round, members are asked to concentrate only on identifying the problems at hand. Once the major problems are cited, members are asked to concentrate on solutions. Van de Ven and Delbecq suggest that the two different aspects might be approached either in different sessions or by different groups.

The Nominal Group As An Intervention Technique

Mosley and Green report success in applying nominal group procedures in all areas or problem diagnosis, planning, and evaluation and in situations as diverse as business organizations, churches, and a university. The members of the organization constitute the membership of the nominal group. Employees work together to identify the organization's problems and to suggest solutions.

For interventions of this sort, Mosley and Green recommend a different problem-identification procedure. They suggest that the participants list the organization's strengths before they list problems: "Changing this one-sided, negative focus into a two-dimensional perspective which includes organizational strengths often has a dramatic, positive effect on the general receptiveness of the entire OD (organizational development) effort, most of which still lies in the future." They also recommend that when intervention in a hierarchical structure becomes necessary, persons of similar rank should be grouped together to prevent a potential influencing of subordinates.

Another, quite different, application of the nominal group is cited by Zastrow. He used the technique to poll a university social work class to discover student preferences for course content. By means of the technique, Zastrow reports that he was able to understand the students' interests and was better able to serve those interests.

Planning New Programs

Because of its ability to generate problem descriptions from a client population, the nominal group technique is especially suited to the early stages of program planning. It is especially useful in cases where a "variety of groups, fragmented in terms of vested interests, rhetorical and ideological concepts, and differential expertise, need to be brought together for a program to emerge or for a change to take place" (Delbecq and Van de Ven).

This description would seem to apply to community service programs in the public schools or any service program designed for the benefit of clients of the school district. These might include programs designed to reach disadvantaged students (special skills programs for minority or handicapped students), programs to implement busing, vocational guidance programs, and counseling and testing programs. Within the district itself, the technique can be used to gather information and ideas about curricular change, policy changes, and program implementation.

Delbecq and Van de Ven have written a Program Planning Model (PPM) that makes use of these nominal group techniques. The first step of PPM is called the problem exploration phase. A target group of participants is identified in terms of their involvement either as potential clients of the new program or as people responsible for implementing it. Which individual are included in this group depends on the degree to which the program will affect them. Once this group is assembled, members are asked to identify problems this new program must solve.

Delbecq and Van de Ven have discovered that the enumerating of problems often involves a revelation of personal details. For example, a program being set up to help handicapped students will probably require the sharing of considerable personal information by the handicapped members of the nominal group. The authors feel that the nominal technique provides a way for the participants to gradually volunteer these "personal dimensions a little at a time."

The actual machinery for running the group will vary from case to case. In large groups, Vroman recommends that satellite groups of from ten to fifteen members be used. The display of written materials will also depend on the number of participants involved. Some commentators recommend listing all materials on a large board in front of an assembled group. Often a break in the proceedings will be necessary to compile and display the list of problems. Some groups will choose to vote on and display only the most significant problems uncovered. In some cases it may be more advantageous to display all ideas to the group.

Knowledge exploration, the second phase of the model, brings together a selected group of clients from phase one and a group of resource experts. This new group is presented with the list of problems resulting from the first meeting. Using nominal group technique again, this group responds to two questions: "What existing resources can be used to solve these problems?" and "What new resources will have to be created to solve these problems?" Respondents list their ansewrs, which are again collected and displayed round-robin fashion. From these answers, a list of existing resources and a list of new resources will be developed.

The final phases of the program do not utilize nominal group procedures. The actual writing of the program description must be accomplished by technicians who match needs with resources. However, the very last phase of the program involves reporting back to the participants in phase one an explanation of the final content of the program.

Thorough information gathering and analysis are important parts of decision-making. The nominal group technique presents an easy, convenient method of gathering information and ideas on a variey of topics from the clients or constituents of an institution.

ACHIEVING CONSENSUS: THE DELPHI MODEL

A decision is a collective agreement on a single course of action. It represents the best response to a current state of affairs and, presumably, it represents a consensus. A large part of decision-making is actually the attempt to find common ground, to reach a decision all parties can live with. The nominal group technique recognizes the importance of achieving consensus when it includes affected parties in the process of program planning.

Although decisions deal with current situations, all decisions face in two directions. They remedy past problems and attempt to anticipate future ones. Thornton and colleagues predict "it is inevitable that more of the future of education" will be taken into account by educational managers. Increasingly, decision-making in the public schools must look toward the future.

How do we achieve consensus in the decision-making process? And how do we plan for the future? For many program administrators, the answer to both questions is the Delphi model.

History and Assumptions of Delphi

As Dalkey and Helmer report, Delphi was originally conceived by the Rand Corporation as a mehtod of obtaining "the most reliable consensus of opinion of a group of experts." The general procedure for the Delphi forecast is quite simple. A number of experts on the subject under examination are selected. They agree to respond to a series of questionnaires to be mailed to them. On the first questionnaire, the experts answer questions and make predictions about the matter under study. The questionnaires are returned by mail, the results are collated, and a second questionnaire is returned to each participant.

On this second questionnaire, some means of reporting the group consensus is employed. The individual's score is also reported. Each participant whose answer lies outside the group consensus (usually defined by a modal or median score) is asked to reconsider his or her original prediction. Any respondent who wishes to remain outside the group consensus is asked to justify that position. A third round of questionnaires reports the new consensus and may also include a minority report of the general reasons participants chose to stay outside the consensus. The original Delphi consisted of five rounds.

Rand researchers discovered that this "controlled opinion feedback" was successful in shaping group consensus toward a final answer. It was extremely successful in answering almanac-like questions and producing consensus predictions about future technologies. The first Delphi attempted to gather opinion about the amount of nuclear firepower that would have to be directed at United States industrial targets to reduce munitions output by a certain amount. Since then, Delphis have been used to predict energy demands, growth trends, and the depletion of resources. Not surprisingly, when social scientists saw the success of Delphi they were attracted by both its consensusproducing powers and its future-predicting qualities. They wanted to use it in their own research.

But as Weaver (1971) points out, the kinds of questions Delphi was most successful in answering had objective, "knowable" technological factors to them. The social sciences do not yet include such factors. It cannot be determined, for example when "alienation and impersonality of urban living will reach its maximum." In fact, says Weaver, we do not even know "what it means to speak of a maximum in this case." Because the data base for the social sciences is so much less developed than it is for the hard sciences, and because of differing interpretations of social indicators, Delphi forecasts have been less successful when dealing with social issues. Weaver (1972) concludes that there are too many variables of a personal and subjective nature to permit accurate predicting of social futures by experts. Delphi, in its pure form, is not appropriate in the social sciences as a prediction device.

The New Forms of Delphi

Although the Delphi cannot be used to predict the "likelihood" of a certain future, Weaver believes we can use the Delphi to talk in terms of what the future "can be made to be." It can be used to help define and create a consensus about social and institutional goals. When used in this way to project a set of values and goals, Delphi is an important tool in futures planning.

The traditional feorecasting Delphi has given way in education to the "normative" Delphi where the goal is to probe values and preferences rather than future events. Weatherman and Swenson analyze two forms of Delphi that have the greatest applicability in school districts: the "strategy probe" and the "preference probe." The strategy probe might be employed by a school district that has mandated a new program and wants to poll opinion on the choice of a strategy to implement it. The first questionnare might be open-ended and simply ask respondents to suggest alternatives. Subsequent questionnaires would ask respondents to narrow their choices and compare the alternatives in terms of cost, ease of implementation, and so forth. In consecutive rounds, a consensus toward a single strategy will emerge. If the respondents themselves are the persons responsible for implementing the program, the move toward consensus will further guarantee the program's success.

The preference probe (called a "focus" Delphi by Sandow) is used in cases when a school district wants to poll its clients or constituents about its priorities. This probe reveals essential information about the participants themselves and their preferences, which the district takes into account when setting its goals.

Both these probes differ significantly from traditional Delphis in that they do not depend on expert opinion. When comparing two studies, Welty discovered that in the area of values forecasting laymen and experts produced roughly the same results. There is no need, then, especially in the area of values forecasting, for a selected panel.

Delphi has many variations. The following applications exemplify some of the situations to which the method has been applied. (Two of five sample applications are given below.)

Media Technology Survey

Spitzer reports the use of a traditional Delphi to predict "trends in the future of educational media and technology which ... might be the most significant in the period culminating in the year 2000." Two hundred potential respondents, chosen from a professional directory, were contacted and asked to "nominate" what they thought were important trends. Half of this group responded to the open-ended questionnaire, and sixty-eight trends were recorded.

These trends were listed in the second questionnaire and returned to the respondents, who were asked to rank them on a one-to-five scale in terms of their "importance," "their predicted increase," and the "certainty of prediction." (The last category, "certainty of prediction," was an attempt to have each person rank his or her expertise in the field; it was deleted after the second round.) In subsequent rounds respondents received information about the consensus of the group and were asked to reconsider their answers. In all, four rounds were conducted.

Spitzer acknowledges that the results of the survey are difficult to interpret because they contain a "number of ambiguities and methodological problems which need further investigation." Some of the methodological difficulties concerned the reporting of the data. Spitzer's data include four pieces of information for each trend in the second, third, and fourth rounds. However, the data for the third and fourth rounds are not readily comparable to that for the first and second rounds because of the deleted item. The data are arranged primarily to demonstrate the consensus convergence phenomenon and therefore in the manner least advantageous to rating the trends themselves.

Because a Delphi consists of statistical information, results must be displayed in a clear, straightforward format.

There is a philosophical problem with the survey as well. It seems to be the uneasy combination of preference probing and expert opinion that Weaver warns against. When respondents were asked to estimate the "importance" of a trend, did they understand that to mean its importance or value to them? Or did they understand it to mean the impact of the trend on education? Unless this distinction is made clear, the Delphi will be measuring two completely different phenomena.

Although the survey was unable to make any final ranking of the importance of certain media trends, it does clearly demonstrate the process of producing consensus.

Ellenstown, Washington, Public Schools

As the public schools reach out into the community to serve its needs, more ways need to be found to poll the commmunity about its attitudes and to acquire its support. Rasp reports a use of Delphi to serve those ends. Similar in some ways to Cyphert and Gant's Delphi at the University of Virginia, this survey in a public school district collected "data from which goals for building better programs could be developed." This four-phase Delphi was mailed to a sample of "local students, staff, parents, citizens, and teacher trainers from the state colleges and universities."

The first questionnaire was fairly open-ended. When recording their opinions, respondents were asked to think in terms of the period from 1975 to 1985:

> As a result of the experiences provided by the
> Ellenstown School District, students should:
> Know ____
> Be Able to __________________________________
> Feel ____
>
> Ellenstown School District should:
> Increase ____________________________________
> Maintain ____________________________________
> Reduce ______________________________________
> Develop _____________________________________

From these first-round questionnaires, a second questionnaire was developed that contained a list of statements. Respondents were asked to circle numbers on a one-to-seven scale. Here are two sample items:

As a result of the experiences provided by the Ellenstown School District, each student should:

low					high		
1	2	3	4	5	6	7	View competition in all things as healthy.
1	2	3	4	5	6	7	Be able to read and understand a newspaper.

A third-round questionnaire was mailed only to those who responded to the second questionnaire. In the third round, the modal answer (the answer cited most frequently) was indicated by a square. The individual's response was indicated by a circle. Respondents were asked to study each item. If the mode for the item did not represent their thinking at that moment, they were requested to state their reasons in a space following the item. The third questionniare had this form:

As a result of the experiences provided by the Ellenstown School District, each student should:

low					high		
1	2	3	4	5	6	7	View competition in all things as healthy.
1	2	3	4	5	6	7	Be able to read and understand a newspaper.

The fourth round recalculated the consensus from the third round and also included a minority dissenting report for each item. The respondent was asked to consider this information as well as the group consensus and to make a final judgment. Rasp and his colleagues decided, in retrospect, that the fourth round was not necessary.

The results of this survey, concludes Rasp, provided Ellenstown's superintendent and staff with valuable information from citizens about community values and school priorities. Even in the face of certain limitations, "Delphi does have strength and utility. It collects and organizes judgments in a systematic fashion. It gains input. It establishes priorities. It builds consensus. It organizes dissent. In short, it cannot be overlooked as a useful and reliable decision-making tool."

Taking a New Look at...
NEEDS ASSESSMENT

Nancy DeLeonibus

"NEEDS" NOT DESIRES OR SOLUTIONS

Although administrators have applied the title "needs assessment" to everything from a simple survey for a semester book list to the complex analysis of an entire school system, the term is becoming today more precisely defined.

Assessing needs simply means identifying the discrepancy between where we are now and where we want to be.[1]

Where We Are   Where We Want To Be

Often, however, "needs" can become confused with "solutions." Educators may state that their schools need new writing skills centers or teacher-adviser teams when, in fact, these programs are the possible means of solving problems.

Suppose, for example, that test scores show 20 percent of the junior class to be reading below grade level. An immediate remedy for that need might be to hire an extra reading specialist or to purchase reading machines to solve the problem.

We can view the matter differently, however, and define the situation as follows:

(1) Where We Are is the present condition with 20 percent of the eleventh grade students having reading deficiencies, and
(2) Where We Want To Be is to reduce the 20 percent group

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> to five percent of the class by a given date, say June 1978. The opportunity then exists to discuss and analyze several alternative solutions for closing the gap, only one of which would be the hiring of a new reading teacher.

When "needs" are defined as discrepancy gaps, the needs assessment process not only provides the possibility for a careful analysis of solutions, it also enables the principal to see where he is going; and, if valid tests are used, to know exactly how close he is to achieving school objectives.

Furthermore, distinguishing between "needs" and "solutions" (or desires) eliminates the necessity to choose between either student needs or community needs, an argument which is circular as well as time consuming and divisive.

WHY NEEDS ASSESSMENT?

A broad rationale exists for developing a needs assessment program. Several states, for example, have mandated needs assessment to meet accountability requirements. This legislation usually includes guidelines and other required procedures for conducting the assessment. For example, in Oklahoma, House Concurrent Resolution No. 1027 states that "the needs assessment shall be undertaken by the local school staff in compliance with general direction and guidelines developed by the State Department of Education." And in 1975, New Jersey enacted a requirement that "each local board of education shall establish particular educational goals, objectives, and standards pursuant to rules prescribed by the State Board."

Declining enrollments and budget cuts give a new priority to the reassessment of school goals and priorities. In Elkhart, Ind., a needs assessment was undertaken to measure how effectively the schools were achieving their goals and objectives as first outlined in 1966, and subsequently used in curriculum planning in that community.

Developing curricula for a new high school, monitoring student and parent priorities, revamping inservice training for staff, assessing program effectiveness, and conducting follow-up studies of graduates are also cited by high school administrators as rationale for needs assessment.

USE OF SURVEY DATA

Many schools administer surveys -- some of them quite comprehensive. Too often, however, results are carefully compiled, only briefly discussed, and then stashed away. Or they may appear cursorily in the principal's annual report to the superintendent. Needs assessment, however, requires not just a reporting of results to all participants; it also includes a process by which results of the survey are utilized for determining school priorities.

WHO'S INVOLVED?

Who shall speak for education? The consensus of as many persons as possible in the local situation is the answer. No knowledgeable person has ever said that improving education is a simple or an easy process. Many persons necessarily need to be involved; the wider the spectrum and the larger the number, the better.[2]

A new imperative for needs assessment arises from public demand that citizens be included in defining educational needs. Participants in the needs assessment process most often include administrators, teaching staff, students, and community members.

In Sandy, Utah, over 550 parents, teachers, students, and administrators in the Jordan School District reviewed needs and established two major priorities relating to students:

- to develop pride in work and a feeling of self-worth
- to develop the basic skills in reading, writing, speaking, listening, and arithmetic.

A Goal-based Educational Management System (GEMS) was then designed to meet the needs of students.

Three related projects involving citizens, parents, students, and staff members were reported by A. E. Cavin, principal, West Bloomfield High School in Michigan. A goal-setting exercise was worked through by 1,500 members of the school community -- staff, students, and parents included. Then a stratified random sampling of residents was asked how they felt about the schools. Then 258 members of the educational community worked in 18 committees for a three-month period listing all the district needs in a comprehensive report to the board of education. Finally, two members from each of the 18 original committees met weekly to compile a list of needs on the basis of priorities.

THE PROCESS OF NEEDS ASSESSMENT

While several models are available, most needs assessment efforts include the following steps:

- Decide on which level to plan initially (class, grade, school, district).
- Select good instruments and processes.
- Determine where you are at present.
- Determine where you want to be.
- Reconcile differences among participants involved in planning.
- Identify priorities and select those on which action will be taken.

Needs assessment should be considered part of a larger planning process. Following the assessment, actions must be implemented and evaluated for needs assessment to make a difference.

In Sarasota, Fla., a thorough needs assessment was conducted at Venice Junior High School. The flow chart is included here to show the place of needs assessment in the total planning effort and to clarify the needs assessment process itself.

SELECTING THE BEST TOOLS

Panel discussions, small-group investigation, questionnaires, community speak-ups, and, in some instances, games have been successfully used as vehicles for needs assessment.

One instrument utilized by the guidance department at North Hunterdon High School in Annandale, N.J. involved a 60-item questionnaire.

NEEDS ASSESSMENT SURVEY

To plan school and community activities that will serve you, we need your help! Please respond to each item by indicating first how important the need is to you and second how well that need is being met, not just by the guidance counselor but by anyone -- your parents, teachers, friends, etc.

Name ______________________________

Grade ______________________________

Directions:

In the columns on the left, mark an X in the box which best describes how important the need is to you.

In the columns on the right, mark an X in the box which best describes how well that need is being met for you.

Mark a response in the left column and in the right column for each of the 60 needs listed.

Strong Need	Moderate Need	Weak Need	No Need	Need Being Met	Need Partially Being Met	Need Being	Not Met
X		To know what jobs are available locally				X	

The above is an example of a strong need which is being partially met.

In Fall River, Mass., students, teachers, and administrators were asked to rank (1-3) a list of items prior to the opening of a new high school. A small part of the results published below show how differences appeared.

A NEEDS ASSESSMENT FOR THE NEW FALL RIVER HIGH SCHOOL
AS DESCRIBED BY STUDENTS, TEACHERS, AND ADMINISTRATOR

Responding Group Services	Improved Student Services	Community Awareness	Updated Guidance
Students	2	3	1
Teachers	3	3	3
Administration	3	3	3

1 = Highest Priority 2 = A priority 3 = Lowest priority

The School Bonanza Game is another tool. It can be administered to students (Grades 4-12), parents, boards of education, and laymen, as well as school staff and faculty. Basically, each participant is given a hypothetical sum of money to invest in various school programs, such as the three Rs or social studies. Players are forced to choose how their money is to be spent and then must rate the school (ranging from poor to great) on how well it is doing in each category. This process leads to a discussion of priorities among the participants. The game has been used inexpensively in many schools.[3]

IS IT WORTH IT?

Yes! Most administrators find needs assessment to be a useful strategy with positive results.

Dr. Frank Rapley from Louisville, Ky., reports that the needs assessment effort in his district helped identify six serious shortfalls that became the basis for staff inservice at the Educational Development Center. Initiated as an attitude survey about Jefferson County Schools, during the first year opinions were solicited from 80 percent of all teachers, 10 percent of all principals, and the central office. Research has now moved more specifically toward student achievement. A mean achievement score in every grade in every school is now reported by the district.

Participation of students in the planning of a new school will lead to their increased commitment and involvement, reports Edward Morgan from Fall River, Mass., where a new student discipline code was developed. In Rome, Ga., needs assessment resulted in a new staff development plan which was subsequently approved and funded by the State Department of Education for implementation.

Principal Walter Habel of Schoharie, N.Y., points out that by setting goals and objectives for each course, curriculum organization and coordination have been more effective. The criteria for reaching objectives have been determined. Expectations for students and teachers have been clarified. Employment of a Career Education Specialist for slow learners has been one outgrowth of this school's needs assessment.

Is it always worth it? This frustration expressed by a principal is repeated here for contrast:

> I can report that the outcome of this program was a carefully thought out priority list of needs. Unfortunately, as in most school districts in our state, the needs identified far exceed our financial resources to deal with them.

If lack of funding or other circumstance prevents concrete actions in response to needs, conducting the assessment still has intrinsic value. It enables administrators, staff, students, and parents to establish common perceptions about and attain agreement on directions and priorities for schools.

WHAT'S SO NEW ABOUT NEEDS ASSESSMENT?

Not much, considering that effective principals have always stayed in touch with what goes on in their schools and made decisions only after careful consideration of all options. But needs assessment does include some important new dimensions of planning:

- Data are collected from all of the school's constituents.
- Priorities are determined conjointly by educators, students and the community.
- Systematic evaluation occurs because needs are stated as discrepancy gaps; their attainment is measurable.

CAN EDUCATIONAL RESULTS BE MEASURED?

Some results, but certainly not all, can be measured. Today's administrator has little time for esoteric rumination, however. His major focus must be on getting the job of measurement done as efficiently and effectively as possible to meet assessment requirements and for future planning. The measurement of stated needs has proven to be a valuable means to that end. For example, determining needs in basic skills can be used as preparation or establishing competency levels.

ISN'T THERE A DANGER IN GIVING EVERYONE A VOICE?

On the contrary, participation of all persons with a stake in education provides not only greater comprehension of what the "schools are doing" but also increases the change that the community will be more receptive to implementation of new programs created to meet new priorities identified from the needs gap.

REMINDERS

Needs assessment is only the first step in the process of thorough educational planning. After priorities are listed and objectives identified, an analysis of alternative solutions (often on cost-benefit basis) should be conducted to determine the best solution or means to achieving desired results. Actions are then implemented and evaluated.

Needs assessment is not a one-shot deal! Some schools conduct needs assessment every year; others, every two or three. In short, needs assessment should be ongoing and continuous.

TO ILLUSTRATE

School Level Needs Assessment

Greenwich High School
John H. Bird, Principal

10 Hillside Rd.
Greenwich, Conn. 06830

In Greenwich High School, needs are assessed and programs established by a team comprised of administrators, teachers, students, and parents to develop objectives and goals for the school on a yearly and multi-year basis. Budgetary concerns are tied into objectives and goals and fed into the board of education's budget committee. Evaluation procedures are developed to complement objectives.

Participants include students in grades 10-12 and all staff, as well as custodians and cafeteria personnel.

The central purpose of the school-level program team is to identify building needs and secure board of education financial support and a board commitment to action.

One priority identified through this process was the need to return to basic writing skills. Actions resulting from this discovery included the development of a Learning Program Improvement Plan combined with the hiring of four writing tutors, one for each of the houses at Greenwich High School. The tutors assist the language arts teachers who have developedstandardized procedures for correcting themes, and they meet with individual students to discuss student writing assignments.

Needs Assessment For Staff Development

Model High School
Nevin Jones, Principal

Route 2, Calhoun Road
Rome, Ga. 30161

Prior to initiating a needs assessment process with teachers, students, and parents, a course for credit on needs assessment was offered during the summer for teachers. In addition, principals in the county attended an all-day needs assessment workshop.

Three working committees were formed:

- Steering Committee:
  Principal, representative from the needs assesment course, and selected teachers.

  Responsibility: Work together for the selection of an advisory committee and to meet as needed throughout the year to guide further activity in the staff development program.

- Advisory Committee:
  Principal, selected teachers, selected parents, and other lay people in the community. The committee did not exceed 20 in number and the number of teachers should be less than the number of parents and students combined.

  Responsibility: To examine the goal statements and survey questionnaire (developed in the Needs Assessment Workshop offered during the summer) and recommend changes and/or alterations.

- Staff Development Planning Committee: (A standing committee) A teacher form each school, representation from FCAE (Floyd County Association of Educators), and three central office personnel.

  Responsibility: Compile system-wide goal statements and survey instrument as recommended by the advisory committees. Rank goals in order of importance, submit new release on forthcoming survey instrument, decide on sampling procedures, and compile and report on returned survey. Also, this committee will give further direction for future staff development as indicated from the survey instrument.

Results of the survey indicated greatest needs in mathematics and language arts. The outcome was that staff development in these two areas was emphasized in workshops and courses the following year with numerous teachers taking advantage of these staff development opportunities.

Needs Assessment For Careers

Jones Commercial High School 606 South State St.
Joan E. O'Malley, Principal Chicago, Ill. 60605

Jones Commerical High School, a school serving eleventh and twelfth grades in office occupational training, has developed several needs assessment techniques.

Since all of Jones' seniors work one-half day as part of their work experience program, the potential employers are surveyed to determine the number of students desired in six major areas: bookkeeping, business machines, data processing, machine transcription, marketing, and stenography.

A follow-up graduate survey reflects student evaluations of the quality of their training, as well as assessment of guidance and extracurricular programs.

In addition, an employer feedback survey, a summary report by teacher coordinators (concerning everything in assessment of students' training under their supervision) and a survey evaluating outside AV equipment resources of students (used in preparation of the Title IV C proposal for a cassette lending library) are all collected as part of the annual assessment data.

Results are used not only for the current year's program evaluation, but are analyzed in combination with previous years' results for trends in employer demands, program weaknesses, and needs for new skills areas. Curriculum revision thus occurs only after an analysis of needs!

Needs Assessment For Opening A New School

B.M.C. Durfee High School 289 Rock Street
Edward P. Morgan, Principal Fall River, Mass. 02720

As a prelude to opening a new comprehensive high school, staff and students at B.M.C. Durfee High School were involved in initial needs assessment in the spring of 1975. The result was a matrix showing priorities as seen by students, teachers, and administrators on such aspects as student choice of instruction and increased options in curriculum choices. Since then, an ongoing needs assessment program has been operating through Project Open, A Title IVC, ESEA Project.

Evaluation questionnaires for all activities such as staff workshops and courses, as well as year-end evaluation, have included questions to update the needs assessment.

Other steps in the preparation for needs assessment included visits to other schools, attendance at conferences, and the writing of a new high school philosophy.

Involvement of students has been extremely rewarding, reports Principal Edward Morgan. One result this year is a new discipline code.

Needs Assessment Of School Goals and Objectives

Central High School
A. T. Bias, Principal

One Blazer Blvd.
Elkhart, Ind. 46513

In 1974, administrators in the Elkhart school system decided to undertake a needs assessment in order to measure the degree of effectiveness in achieving goals and objectives of the schools. Because the Phi Delta Kappa model included goals which were significantly comparable to Elkhart school goals, it was chosen as the needs assessment instrument.

Selected groups of parents, students, and staff were asked to make three responses in relation to 18 goals. Participants were asked to rank the importance of each goal (on a scale of 1-5) to estimate how well the Elkhart community schools were doing in meeting each of the goals (on a scale of 1-5), and finally, to cite what the school's responsibility in each of the 18 goal areas should be.

Emerging was a list of the goals ranked in order of importance based on all participants' viewpoints. A series of recommendations followed. Included were suggestions that the same survey should be repeated at a later date in order to measure any changes in perception of these 18 goals and that inservice and professional growth activities be designed to help staff members address themselves to the resulting goal priorities.

Needs Assessment As Part Of A Follow-Up Study of Graduates

West Bend E. and West Bend
W. High Schools
John M. Sheehy, Principal

1305 E. Decorah Rd.
West Bend, Wis. 53095

John Sheehy describes the process of follow-up studies at the West Bend High Schools as follows:

Six years ago the West Bend School district authorized a budget expenditure to cover the cost of developing a follow-up research assignment. At that time a questionnaire was designed to obtain perceptions from graduates of the classes of 1971 and 1972. The unique educational programs as reflected by the schools-within-a-school concept, variable modular scheduling, and individualized learning prompted a need for evaluation.

The perceptions gathered from the questionnaires were related to the quality of the curriculum, the educational process, and vocational education. Information regarding these areas helps teachers, administrators, and the school board look at needs and changes.

In order to maintain a continuity and credibility in the findings of the alumni follow-up studies, classes were to be surveyed every first, third, and fifth year after graduation. As a result the classes of 1971 and 1972 have been surveyed three times, the classes of 1973 and 1974 have been surveyed twice, and the classes of 1975 and 1976 were surveyed once. This past year, for example, 1,500 questionnaires were prepared and mailed to the homes of all members of the graduating classes of 1972, 1974 and 1976. The previous year questionnaires were sent to the classes of 1971, 1973, and 1975. Parents are urged to forward the forms to their sons and daughters, and to encourage them to fill them out.

Answers to the questions have provided valuable information for planning. In addition, since the questons are designed for easy processing, a local business establishment has devised a data processing program through their computers. Results shared with teachers, community, and the school board have, in Sheehy's words:

> encouraged continuation of the program, and have been instrumental in the support, implementation, and continuation of alternative programs, flexibility, humaneness, and action learning within the school program. We have found a positive correlation between the objectives of the school and their fulfillment as told us by the graduates.

Determining Cognitive Needs

Rhodes Junior High School
Dr. Gail Pew, Principal

1860 South Longmore
Mesa, Ariz. 85202

A complete assessment of "cognitive needs" was conducted at Fremont Junior High School. Instruments surveying such needs were filled out by parents as well as by students and teachers. A practical guide for teachers for the development of the statement of needs from the cognitive needs assessment questionnaire resulted. Part is included here as an aid to administrators:

The First Step - State needs objectively.

Example: Item 6

Do you feel that girls should be allowed to take industrial arts courses?

	S	P	T
a. Yes	56	62	97
b. No	17	8	0
c. Undecided	18	17	5

The majority of students (56 percent) agree with the statement. A significant discrepancy exists, however, between student and teacher opinion.

The Second Step - The need has been stated objectively. No solution is implied. The group should then brainstorm possible reasons for the discrepancy.

A. Boys do not want girls in industrial arts classrooms.
B. Girls do not want to take industrial arts.
C. Students do not see the potential advantages of having girls in industrial arts.
D. etc.

The Third Step - Once the needs are listed we move to the goal statements or general (what is required) statement. Some examples are provided below:

1. Girls will appreciate the masculine skills of an industrial arts classroom.
2. Boys will understand and appreciate the talents of females in the industrial arts classroom.

The Fourth Step - Develop "parsimonious" goals.

Go back and try to develop goals which incorporate as many subgoals as possible; i.e., following the principle of parsimony -- explaining the most things with the least amount of words.

A Needs-Assessment Matrix for Guidance

Richard Gahr High School
Hanford Rants, Principal

11111 Artesia Blvd.
Cerritos, CA 90701

A comprehensive model for action within the guidance framework at Richard Gahr High School is described in A Resource Approach to Pupil Services. In preparing a needs-objectives matrix to determine which services would be beneficial to students at Gahr, the following steps were taken:

> District surveys aimed at all participants in the educational community as well as special program questionnaires were used.
>
> The needs survey portion of the 1975 Pupil Personnel in Los Angeles County was analyzed.
>
> The needs portion of the National Association of Secondary Principals' monograph, This We Believe, was read.
>
> Counseling and guidance sections of the RISE report were considered.
>
> San Diego city schools' Model for Action was viewed.
>
> Gahr High School surveys (including assessment of the parents of the freshman class) were completed.

Resulting from this survey was a matrix for needs objectives which reflects catgories revolving around the guidance domains as follows:

Educational Personal-Social Career-Vocational

By combining the three domains with needs from the above sources, as well as an NDEA survey of counseling tasks related to needs (1976 San Diego State University) the matrix was developed.

FOOTNOTES

1. Kaufman, Roger, Needs Assessment. San Diego: United States International University, 1976. p. 38.

2. Trump, J. Lloyd. A School for Everyone, Reston, Va.: NASSP, 1977, p. 11.

3. For information about the Bonanza Game, write to Professor David Mullen, College of Education, G-10, Aderhold Hall, University of Georgia, Athens, 30602.

Suggestions for Conducting the Self-Study - an excerpt

Texas Education Agency

OVERVIEW

The Self-Study calls for two "searches." One is a search for unwanted discrepancies in student learning (student needs). The second is for unwanted conditions in the instructional program (program discrepancies). Although it may be valuable to the district for the student needs search to be well along before the search for program discrepancies is launched, the district may choose to conduct both searches simultaneously.

Each search uses appropriate "probes" to locate problems. The probes for the student needs search are the goal indicators previously adopted by the district. The search for program discrepancies uses two probes: (1) program standards and criteria, and (2) priority student needs.

The district begins the first phase of the Self-Study by conducting an assessment of student performance, with regard to desired goals, to identify learning needs. The student assessment compares the actual status of student performance with the district's established expectations for each of the student development goal indicators.

The district begins the search for program discrepancies with the Principles, Standards, and Procedures for the Accreditation of School Districts (TEA Bulletin AD7 82501) and, as appropriate, with other criteria. As did the goal indicators, these standards and criteria identify desired characteristics. They become references to which present status in the district

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can be compared. But, an additional probe is used to search for program discrepancies. It consists of the "priority student needs" selected at the end of the student needs search. Here, the search of the program is conducted to determine causes of student learning needs. Some of these causes may be related to program discrepancies discovered when comparing the program with Accreditation Principles, Standards, and Procedures. Professional judgment of the existing programs will determine other causes of learning needs.

Both searches are conducted by (1) posing questions, (2) securing answers, (3) synthesizing the answers, and (4) drawing judgments. Both searches pose the question, "We desire this; to what degree do we have it?" Answers are secured from observers as perceptions or as informed comparative judgments. Perceptions or judgments are checked against recorded data and/or measurements of current year status; this process is referred to as documentation. Answers from different sources are then synthesized by district decision-makers. Finally, a few discrepancies are selected as targets for improvement in the Five-Year Priorities Plan.

Throughout both searches, narrowing and reducing the scope of attention occur repeatedly. As a first step, the district may choose to survey the school/community to determine how well students are perceived to be achieving district goals. This process eliminates many of the goal areas for further study. Those areas which are perceived to be significant problem areas become candidates for documentation.

Gathering objective evidence to confirm or reject perceived student learning needs further reduces the number to be documented as serious problems. Professional judgment will also eliminate some of the perceived needs if the problem area is one which the school district cannot do much about.

During the program analysis weaknesses are identified through application of standards and criteria of sound educational practice. Documented student learning needs are used to further determine serious discrepancies in the district's instructional program. Those program deficiencies which are judged to be causing student learning needs become prime candidates for improvement efforts.

After a series of reductions in both searches, the district selects a small number of priority student learning needs and program discrepancies to address in the Five-Year Priorities Plan. Many factors enter into the selection of the two-to-four student needs and the one-to-three program discrepancies selected for concentrated planning efforts. One crucial factor in determining priorities is whether the district can incorporate successful treatment into its Five-Year Priorities Plan.

I. GOAL INDICATORS

Conduct Inventory of Perceived Student Needs

Prior to conducting the Self-Study, each district will have established a set of student development goals and goal indicators. Approved and adopted by the board of trustees, these goals and goal indicators serve as the foundation for the district's planning and evaluation functions. Specifically, the goal indicators serve as the reference points against which student performance will be assessed.

One method of getting information on discrepancies in student performance is to ask members of the school and community for their opinions and perceptions of how well students are mastering the goal indicators. It must be recognized that "preceived needs" represent discrepancies which may or may not be supportable by objective facts, but community opinion regarding student performance has value in providing certain useful information. First, student needs as perceived by various respondents suggest areas where actual learning discrepancies are likely to exist. Second, this information may give a good indication of where the staff, community, and students have highest interest and will support efforts for improvement. Third, knowledge of these perceptions will allow a district to appraise the community's understanding of the progress students are making toward the goals.

Using the district's goal indicators as the basis for collecting perceptions, the following steps outline a process for inventorying perceived student needs.

- review the goal indicators
- select the method and appropriate techniques for obtaining perceptions
- collect opinions
- summarize results
- identify perceived student needs
- select perceived needs for further (documented) study
  Some districts may wish to eliminate the formal inventoryof perceived student needs altogether, and move directly from the goal indicators to the documented assessment of student achievement.

Review Of Goal Indicators

The professional work group (see page 42 for explanation of the professional work group) should carefully review the goal indicators to make sure that they include all the learning areas covered by the goals. The meaning of the goal indicators should be sufficiently clear to persons whose opinions will be asked regarding degree of achievement by students. In addition, the level of expectation the district has for student mastery should also be stated. One way of accomplishing this is to develop learning objectives for goal indicators, although this step is not mandatory as a basis for conducting a perceived needs survey. However, this kind of definition will be necessary for the more objective assessment of student needs which follows in the next step.

Goal: Students should achieve knowledge of the traditionally accepted fundamentals in reading, mathematics, writing, listening, viewing, critical thinking, and oral communication.

Goal Indicator #1: Reading

1. Students are able to read and understand written material.

Objectives: Expected levels of mastery

1.1 The student should be able to identify the main idea of a written selection appropriate to his/her instructional level as measured by a criterion-referenced text.

1.2 The student should be able to draw logical conclusions . . .

1.3 The student should be able to recall specific facts and details . . .

Selection Of Method/Techniques

A school district may use a variety of methods to identify student needs as perceived by members of the school and the community. Factors influencing the selection of a method include (1) type of information desired, (2) amount of time required, (3) resources, and (4) personnel available to conduct the survey.If the number of respondents to be surveyed is small, a well-structured meeting(s) could provide the necessary feedback. Another approach to identifying perceived needs is to solicit opinions by telephone survey.

A number of survey instruments have been developed forl4onducting an inventory of perceived needs. These instruments are used to gather subjective information from a wide range of persons within the school/community. The regional education service centers are a good source of assistance and many have available useful models, techniques, and information collection instruments. Some districts have used instruments which allow them to survey perceptions of student performance at the same time they are validating district goals. This dual purpose information collection method usually results in a significant saving of time and resources.

It may be necessary, however, for a district to develop its own or adapt parts of existing survey instruments in order to collect useful information for goal indicators. One school district surveyed the perceptions of this school and community using modifications of an existing instrument. The general format used for this example is shown in Figure 1 below.

Figure 1

Sample Opinion Poll - Student Performance

Listed below are several areas of student achievement which are a part of the Goals for Student Development adopted by the Board of Education. Based upon your knowledge and perceptions of the students in our district, you are asked to indicate to what extent they are achieving the Student Development Goals.

Are you: (please check one)

Educator ____________
Student ____________
Parent ____________
Representative of
Business/Community ____________

Are you:

American Indian ____________
Asian ____________
Black ____________
Mexican American ____________
Anglo and Other ____________
I prefer not to specify ____________

Your age is:

Under 20 years ____________
20-30 ____________
31-45 ____________
46-60 ____________
Over 60 ____________

Please circle the number beside each statement to indicate your opinion.

Ratings:

No Opinion	Most Students are Achieving	Many Students are Achieving	Some Students are Achieving	Few Students are Achieving
X	A	B	C	D

Goal: All students should achieve knowledge of basic skills.

Goal Indicators:

1. Students are able to read and understand written materials.	X	A	B	C	D
2. Students are able to express their thoughts, ideas, and feelings in writing.	X	A	B	C	D
3. Etc.					

- Collecting The Information

An opinion survey should reflect the perceptions of a representative sample of school/community members. It is essential to include the opinions of professional staff members who are in the best position to observe student performance. This sample may be selected randomly or chosen to represent special groups within the school/community. Groups with different perspectives such as ethnic background, age, sex, geographic location within the city, and type of employment should be represented in sample.

FOR EXAMPLE:

One district involved the following groups:

	Distribution	Return
Educators	100	70
Students	100	65
Parents	100	41
Business/Community	100	48

- Summarizing The Results

Since several types of persons are represented in a survey, it is important to recognize perceptions of various subpopulations when analyzing and reporting results. For example, ratings from each subpopulation for each goal indicator can be categorized and analyzed to develop a profile of perceptions. The profile will allow decision-makers to look at areas of consensus and areas of disagreement among subpopulations. Usually this kind of information is most helpful if it is collected and reported by each campus in the district. A sample profile of perceptions is shown in Figure 2.

Figure 2

SAMPLE PROFILE OF PERCEPTIONS

Profile: Goal Indicator #1

- Students are able to read and understand written material.

GROUP						
Educators	70	0%	13%	16%	34%	37%
Students	41	9	20%	26%	25%	20%
Parents	48	7%	5%	10%	22%	56%
Business/Community	65	10%	15%	21%	29%	25%
American Indian	2	0%	50%	0%	50%	0%
Asian	2	0%	0%	50%	0%	50%
Blacks	38	8%	16%	21%	29%	26%
Mexican American	53	6%	13%	23%	26%	32%
Anglo and other	120	4%	14%	17%	29%	37%
Prefer not to specify	9	33%	0%	11%	22%	33%
Under 20	62	10%	19%	26%	26%	19%

20-30	25	4%	12%	20%	32%	32%
31-45	69	2%	12%	16%	28%	42%
46-60	54	4%	13%	14%	30%	39%
over 60	14	21%	7%	14%	29%	29%

Note:

The percentages which are circled are the more significant "majority" responses of the various subpopulations.

- Selecting Significant Perceived Needs

The inventory of perceived learning needs will provide the district with important information on how the community feels about the performance of students. The information can be used to identify student performance needs that are perceived to be of high priority by the school/community.

The district's decision-makers should reduce the list of perceived student learning needs to a smaller number in order that they may be studied more closely. The list of perceived needs along with all other sources of information, such as that collected in previous assessment studies conducted by the district, may be used as the basis for placing each goal indicator in one of two categories:

I. Satisfactory Student Achievement Areas: No further information will be collected on these areas at this time.
II. Unsatisfactory Student Achievement Areas: A few student performance areas will be selected as "significant" areas for further investigation using factual, objective data.

The areas listed in Category II are recorded as "Significant Perceived Needs" and will be investigated more thoroughly in the next phase of the Self-Study, the documented assessment of student learning needs.

FOR EXAMPLE:

Significant

	Goal Indicators	Perceived Student Needs
1.	Students are able to read and understand written materials.	A majority of school/community members surveyed felt that many students in the district did not demonstrate proficiency in understanding written materials.

2.	Students are able to express their thoughts, ideas, and feelings in writing.	A majority of school/ community members surveyed felt that many students did not possess sufficient skills in writing.
3.	Etc.	

II PERCEIVED STUDENT NEEDS

Documenting Student Needs (Gather Objective Evidence To Confirm Or Reject Selected Perceived Needs)

While the perceived needs inventory collects opinions of school/community groups, the documented needs assessment is the step in which objective information on student performance is obtained. Objective information includes achievement test scores, objective appraisals by qualified observers, records maintained by the district, teacher-made tests and other sources as appropriate. See Standard 4C of the Principles, Standards, and Procedures for the Accreditation of School Districts. The product of this action is a list of documented student needs.

- Use Assessment Questions

Assessment questions guide the process of collecting objective information. By using assessment questions, the school district will avoid collecting irrelevant information and can focus efforts on gathering evidence to:

- determine actual status of student performance
- confirm or reject whether each significant perceived student need is a serious discrepancy in student performance
- further define the need in terms of special groups, subpopulations, etc.
- determine possible causes of documented student needs

FOR EXAMPLE:

Assessment questions for Studying Significant Perceived Needs.

1. Is the goal indicator specific enough to be measured? If not, what learning objectives are required to further define this goal indicator?

2. What is the expected (desired) student performance level for this goal indicator?

3. What is the actual student performance, as determined by factual evidence?

4. How far below desired (expected) level is student performance? By subpopulation?

5. Is the student performance level on these objectives far enough below desired level to be termed a "serious" discrepancy?

- Organize Available Data

Most districts already have on hand numerous sources of data by which to document student learning needs. Existing records of the district are the first palces to look for information to answer the assessment questions, particularly question number 3 above. The district's management information system generally includes such data as:

- district-wide testing programs
- statewide assessment programs
- Federally funded testing programs, e.g., Compensatory education, Special education, etc.
- records of structured observations of professionals
- attendance records, dropout records, absenteeism reports, etc.
- district-made and teacher-made tests

- Collect Additional Data

When all available data have been collected and analyzed, it may be necessary to collect additional evidence to help determine whether there are discrepancies between actual performance levels and desired performance levels on selected goal indicators.

If tests are used to collect additional data, selection of instruments should be made for the deliberate purpose of determining current levels of student performance. Measurement should reflect mastery or non-mastery of designated skills, knowledge, or attitudes in goal areas where significant perceived needs were identified.

The selection of effective methods of measurement should be given careful attention.

1. Measurement instruments should be screened or developed to ensure that those selected for use are valid measures of the objectives under investigation.

2. Information on the reliability and validity of a measurement instrument should be carefully reviewed.

3. If the district is unfamiliar with a commercially developed instrument, opinions and experience of previous users may be helpful. (Buros' Mental Measurements Yearbook is a good source of information.)

Only those measures/instruments which are useful in instructional planning and decision-making should be administered. A District should choose the most accurate and reliable measures available in view of competing demands on the district's resources, instructional time, and staff commitment. Some of the assessment methods a district can use to document student learning needs include the following:

Criterion-Referenced Tests measure student achievement on specific instructional objectives set by the district and show whether students have or have not mastered those objectives. The results of criterion-referenced tests help the classroom teacher to:

- diagnose students' strengths and weaknesses in terms of specific objectives.
- prescribe learning activities to assist in eliminating deficiencies
- plan individual or small group instruction to overcome deficiencies of only one or a few students in the classroom
- organize classroom instruction to meet primary needs which are common to all students in an entire class
- determine student attainment of specific objectives following instruction
- evaluate how well the instructional program is achieving its objectives
- have reliable objective information for planning

educational programs for students transferring from other schools

- have comparable test results from one year to another in order to pinpoint areas in which instruction should be modified

- inform parents on the progress of their children in attainment of educational objectives

Norm-Referenced Tests enable the district to compare individual student performance in broad areas of achievement with that of other students in a national sample. Norm-referenced tests can be used to report performance of individual students, whole classes, or entire districts. Test results allow:

- teachers to obtain general information about students' learning strengths and weaknesses in broad achievement areas

- administrators to determine whether a class, school, or district has reached expected goals

- schools receiving transfer students to have reliable objective information for planning those students' educational programs

- instructional planners to compare test results from any year to another and identify areas in which instruction should be modified
- parents to receive information on the progress of their children in broad goal areas

Other methods of measurement besides standardized criterion and norm-referenced tests include:

- TEACHER-MADE TESTS provide important information about student performance. They largely determine a student's grade and academic record. Well-written items from a teacher-made test indicate what is being taught in the classroom because they are developed to measure specific student learning objectives.

- SAMPLES OF STUDENT WORK, particularly written compositions and research assignments, are demonstrations of applied learning skills and knowledge.

- RECORDED OBSERVATIONS by professional personnel of student performance on specified learning objectives will likely be used in all acheivement areas. The district may rely particularly on these professional observations in areas such as dramatics, other performing arts, athletics, and vocational arts where other standardized testing methods are not available.

- APTITUDE TESTS assess student potential and can serve as a basis for placement of students in courses.

Tests and other instruments of measurement may be scored by the teacher, the school's testing facility, or by a commercial service. Many schools are utilizing data processing services provided by the regional education service centers. Computer processing services provide accurate and fast information and relieve the district of the tedious and time-consuming task of hand-scoring.

Note:

In many cases the district will have encountered difficulty in collecting the kinds of information necessary to document a student learning need. If so, the existence of this condition (lack of useful management information system) should be noted as a program discrepancy, and should be considered on the list of program discrepancies dealt with under the program analysis section. (See page 29.)

- Analyze All Data

The data the district has collected to determine current levels of student performance should be arranged into appropriate tables, graphs, and charts for close examination. Analysis of data calls for the integration of judgments with test scores and other objective data (See Figure 3.)

Goal: All students should achieve knowledge and competencies in the basic academic skills.

Goal Indicator

1. Reading Achievement Mastery of essential reading objectives measured at grade levels 4, 6, and 10.

Measurement Method

1.1 Criterion referenced tests

1.2 Norm-referenced tests

1.3 Teacher-made tests

1.4 Observation of student work

1.5 Cumulative records of students' reading achievement

Findings

1.1 65% of the students in Grade 4 demonstrated mastery of the essential reading comprehension skills

68% of the students in Grade 6 demonstrated mastery of the general and applied reading comprehension skills

70% of the students in Grade 10 demonstrated mastery of the general and applied reading comprehension skills

1.2 34% of the students scored between the 20th and the 50th percentile

38% of the students scored below the 20th percentile Grade 6 . . . Grade 10 . . .

(A similiar display of data for Grades 6 and 10 as that shown for Grade 4.)

1.3 Etc.

It may be necessary for the district to analyze district-wide student achievement data by campus and by subpopulation groupings in order to pinpoint specific areas of student learning discrepancies.

For example, district-wide data from a criterion-referenced test indicated that only 65% of the students in Grade 4 demonstrated mastery of the general reading comprehension skills designated as essential for that grade level. To achieve a more thorough analysis of specific need areas, the district should examine fourth grade reading achievement by individual campus and by subpopulation groupings.

FOR EXAMPLE:

LAMAR ELEMENTARY SCHOOL (GRADE 4)

Sub-population Groupings	Student Demonstrating Mastery
Low socio-economic status (Title 1 eligible)	30%
High socio-economic status	80%

Male	65%
Female	65%
Migrant Students	50%
Other as appropriate	%

- Identify Documented Student Needs

Once documented evidence of student performance has been collected and thoroughly analyzed, the district is ready to develop student "need" statements. Need statements describe the difference between what was expected and what is actually occurring in terms of student performance. Data such as that displayed in Figure 3 on page 19 provide information for the need statements.

FOR EXAMPLE:

Goal Indicator #1:	Students are able to read and understand written materials.
Objective #1	The student is able to read and understand passages equivalent to those on the front page of a newspaper as measured by a criterion-referenced test.

1. WHAT SHOULD BE: (Desired)

   The district has established that 95% of tenth grade students should demonstrate attainment of essential reading objective #1.

2. WHAT IS: (Actual)

   Sixty-five percent of the tenth grade class demonstrated mastery of this objective.

3. STUDENT NEED STATEMENT:

   A 30% discrepancy exists between the number of students expected (desired) to demonstrate mastery of the objectives and the number that actually did demonstrate mastery.

To help establish priorities among the documented learner needs, need statements should be developed and grouped according to the goal areas they represent.

III DOCUMENTED STUDENT NEEDS

- Establish Priorities Among Documented Student Learning Needs

- Report Results of The Student Needs Assessment

- Establish Priorities

After grouping the identified student learning need statements by goal area, the district can begin to establish priorities. Assigning priorities among identified student learning needs may be accomplished by tentatively identifying the maximum number of student needs the Five-Year Priorities Plan can successfully address. The number should be few.

Setting priorities can be done most effectively with the exercise of "pooled" judgment. Factors to consider when determining which student needs are to be given highest priority include such things as:

- severity of the discrepancies between desired and actual student performance levels

- how critical the need is to student progress in the instructional sequence

- whether the goal indicator is essential or desirable*

- resources required to make a significant reduction in the student need*

- having staff competence available to carry out a program to improve student learning in a goal area*

- strength of support likely to be given by the board of trustees and administrators.

*Note:

Much of the information for determining priority student needs is obtained during program analysis as well as the student needs assessment.

- Reporting Results Of The Assessment

The list of priority student needs should be printed and reported to the various school/community groups with an explanation of the process by which the needs were identified. In order to make the results of the student needs assessment as meaningful as possible, the school district may find it necessary to use different ways to display the information, e.g., tables, graphs charts, or summaries. Dissemination techniques should be determined by the type of audience receiving the information -- the board of trustees, professional staff, parents, students, and business representatives. The level of information reported to the board of trustees may be the same as or similar to the information reported to the Texas Education Agency (See page 36).

IV PROGRAM STANDARDS AND CRITERIA

Examine Program Using Standards and Criteria

Earlier it was pointed out that the Self-Study calls for two "searches"--one for student learning needs and one for program deficiencies. It was also noted that both searches may be conducted simultaneously, or the student needs assessment may be initiated well before the program analysis begins. Regardless of which is initiated first, the two "searches" should exchange information at different points during the self-study. For example, to analyze the existing program, the district makes use of information collected about student learning needs and applies standards and criteria of good practice to determine program discrepancies. Identification of serious student learning gaps and the attempt to find causative reasons for the existence of these gaps provide useful data for locating program weaknesses, that is, areas in which the instructional program is not as effective as is desired. In turn, information from the program analysis will probably provide significant guidance in the selection of prioritiies among the documented student needs.

- Select Standards and Criteria For Analyzing Existing Programs

Many sets of criteria and standards are available to the district to use in evaluating the effectiveness of the educational program. The basis set of criteria that eachdistrict must use is the Principles, Standards, and Procedures for the Accreditation of School Districts, TEA Bulletin AD7 82501. The accreditation standards, along with other criteria which the district may select, provide the district with a set of standards and criteria for program analysis.

Many professional organizations have published criteria for their areas of specialization--library, mathematics, language arts, social studies, and others. Specially funded programs, such as Special Education and Migrant Education, also have program guidelines. The agency has available program guides which are listed in the Supplemental Resources Bulletin AD7 82502.

Another reference some districts may select as part of the basis for program analysis is the Evaluative Criteria, published by the National Study for School evaluation. To coordinate efforts, schools belonging to the Southern Association of Colleges and Schools will probably select program analysis criteria which are used with the Association evaluation.

The district may want to assemble a composite set of instruments by drawing upon those mentioned above. Assistance in identifying evaluation instruments and accompanying manuals may be obtained from the Division of School Accreditation Planning and Approvals. The regional education service centers are an excellent source of information. Some districts may want to use outside consultants to assist and reinforce the district's work groups conducting the various components of the program analysis. Such consultants should be thoroughly familiar with the Agency's Principles, Standards, and Procedures and related "suggestions" documents.

- Apply Standards and Criteria

Although a steering committee (See page 41) may provide overall direction for the application of standards and criteria, this group typically appoints small professional work groups to study each program component and compare it with the selected criteria. At the same time, these work groups will be making judgments on the extent to which standards set forth in Bulletin AD7 82501 are being met, and are noting any causative reasons for the existence of student learning needs.

The standards and criteria become questions which the work groups ask about the program component being examined. Each standard or criterion is used in a manner similar to the way a goal indicator was used in the assessment of student needs. The criterion statement is transformed into a question:

"How satisfactory is the present program with respect to meeting the criterion or standard?" This requires, on the part of those conducting the search, (1) understanding of the intent of the criterion or standard, (2) the collection of evidence revealing how well a given program or condition coincides with that intent, and (3) judgment that the district's educational program has or does not have a discrepancy. This evidence will be used later to help establish priorities and develop a plan for improvement in priority areas designated by the district. The evidence secured will consist of informed professional opinions, supplemented by objective data of other types. Various sources of objective evidence that may be used include:

- courses of study
- observations of classroom instruction
- interviews with teachers and students
- appraisal of physical facilities
- records of use of instructional media
- condition and relevance of textbooks and other instructional materials
- student records

  grades
  health
  test results
  student acitivities

- placement and follow-up system
- community data
- personnel files
- self-evaluation procedures

The effectiveness of the work groups conducting the searches will be enhanced if the steering committee provides them with:

- information on priority student needs already identified, or being investigated, through the student assessment process
- copies of the selected criteria and appropriate sections of Bulletin AD7 82501 and other relevant materials
- staff orientation (including suggestions for specific methods and techniques) on the application of program standards and criteria
- preliminary time scheules.

- Identify and List Program Discrepancies

Professional work groups should list program discrepancies which they find in their areas of investigation. Each item on the list represents a discrepancy found between the existing program and one or more of the standards or criteria being used. (These program discrepancies are observations about the educational process--in contrast to the student needs which were observations of student performance toward goal attainment.) These lists should contain notations which identify each specific standard or criterion that is not being met and which specify how the program fails to comply with the standards. Information which indicates a relationship between documented student learning needs and program deficiencies should be included in the reports. This will facilitate analyses of the relationships between student learning needs and specific program deficiencies.

V IDENTIFIED PROGRAM DISCREPANCIES

Analyze Relationship Between Student Needs and Program Discrepancies

The last phase of the Self-Study is an investigation of program factors which are judged to be causally related to the priority student learning needs. This step in the Self-Study requires careful analysis of all information acquired to this point. This information should be used to examine identified program discrepancies and the ways these program weaknesses may be contributing to the priority student learning needs. This analysis should produce a list of priority program discrepancies which the district will address in the Five-Year Priorities Plan.

- Examine Program Discrepancies For Causes of Student Needs

A most important step in program analysis is using the priority student needs as probes to locate those features in the existing program which the professional staff judges to be the causes of the student learning needs. These determined causes may reinforce some of the program discrepancies which have already surfaced in comparison of the program with standards and criteria. However, there will likely be other program discrepancies turned up by this "student needs" probe--that is,other program weaknesses in addition to those already identified in comparison with standards and criteria. There is only one principal method of identifying these "student needs" related program discrepancies: professional judgments of the staff who are in the best position to observe the way programs are working and the effects they are having upon students.

- Analyze Curriculum And Instruction Relating To Priority Student Needs

At this point in the process the district should pinpoint those programmatic factors relating to student needs by thoroughly examining the parts of the instructional program which directly influence student performance in the priority learning need areas.

FOR EXAMPLE:

> A priority student learning need is that 35% of students in the middle school do not demonstrate expected mastery of reading for comprehension. Reading teachers in the district, grouped by grade level, by elementary/secondary programs, or by campus, study the reading program to determine what is happening instructionally with the students for whom this learning need has been identified.
>
> The district involves other staff members whose areas of responsibility affect priority student learning needs in the analysis of instruction for this particular area. This analysis reveals that several factors in the existing program of reading instruction are judged to be contributing to inadequate student learning: (1) inadequate variety of reading materials, (2) time devoted to reading instruction too limited, and (3) teachers lack adequate diagnostic information on their students to permit effective instruction.

Student learning gaps may be caused by the manner in which programs are planned and operated, for example:

- Instructional objectives may not have been developed in proper scope and sequence or the objectives may be insufficiently developed to fully over the curriculum area.
- The sequence of learning activities may be poorly designed.
- Instructional materials and resources may be inadequate or inappropriate.
- The staff conducting the programs may lack certain necessary knowledge or skills.
- The existing program may not take into account the special characteristics of the students served.

- Some priority learning needs may occur because there is no instructional effort for that goal area.

Close analysis of the existing program will help the district determine where essential knowledge, skills, and competencies are being taught, and will also help locate gaps, redundancies, and/or omissions in the instructional program.

- Establishing Priorities Among Program Discrepancies

Conducting the program analysis will by now have produced a number of program discrepancies which will be of two basic types:

1. Program discrepancies which have a direct causative relationship to the identified student needs.

   For Example:

   Inadequate mastery of reading is identified as one of the districts priority student needs; identification of discrepancies in the reading program would be an example of a program discrepancy which has a direct causative relationship to the identified student need.

2. Program discrepancies which do not have a direct causative relationship to priority student needs, but which are still regarded as important discrepancies from program standards and criteria.

   Lack of appropriate physical education facilities for the middle school or an insufficient organizational plan for curriculum development for the essential student learning objectives are program discrepancies of this type.

From these two basic types of program discrepancies the district selects those judged to be of highest priority to address in the Five-Year Priorities Plan. Judgments on priorities will be based on information that has been collected throughout the Self-Study process. The priority program discrepancies selected will probably include both those that are directly related to identified student needs as well as those that are only generally related. (See Figure 4 on page 38.) Obviously, however, those program discrepancies which, if corrected, will bring about improved student achievement in the designated priority student learning need areas should be selected as priority program discrepancies to be addressed in the district's Five-Year Priorities Plan.

STAGE 3

SELECTING A PROGRAM

- Identifying strengths and weaknesses of present program
- Identifying resources and constraints
- Developing selection criteria
- Locating possible programs
- Analyzing programs against selection criteria
- Making a decision

The linking agent is the guiding influence in steering a program development group toward the selection of an appropriate program. Present programs must be evaluated and strengths and weaknesses, resources and constraints identified. Criteria for selection must be developed. Possible programs must be located and then analyzed, applying selection criteria to the identified programs. Finally, the linking agent helps the group make a program decision and guides it in presenting that decision effectively.

Identifying strengths and weaknesses of present program

The first phase of the curriculum improvement effort has involved looking at the problem and getting a clearer idea of "where it hurts." As the school site begins to consider solutions for this problem, it is helpful to assess the strengths as well as the weaknesses of the current program. It is important for school staff to recognize and build on the good parts of their present programs. Such an assessment may lead to a decision about whether to replace the program entirely or just change certain parts of it. It should definitely help people to include in their criteria for a new and better program those elements that are successful in their present program. This helps school staff to affirm the good parts of what they have and to strive to preserve them.

Identifying resources and constraints

While the school examines the qualities of its present curriculum, it should also be examining its resources and constraints. How much money is available for the improvement effort and in what budget categories is it located? How much teacher time can be made available for training, planning, etc? What are the "givens" in the schedule -- city or state standards for time on a subject, lunch schedules, specialist's time ? This information helps the linking agent to know what school resources can be utilized in the improvement effort and what aspects of the school organizational structure might interfere. What are the constraints? What contractual obligations are there for after-school meetings or summer work? Is there pressure on the school to achieve quickly or to show certain results by a certain time?

The linking agent should be recalling information from the earlier organizational diagnosis and should use this information in planning. For example, the linking agent may have learned that the principal feels a need to show proof of success to the superintendent, although there is no "official" requirement to do so.

Locating possible programs

School districts typically use a very limited number of sources for programs. Commercial publishers and word of mouth are the two main sources for finding materials and programs. These sources are good ones and should not be ignored. Commerical publishers often have training programs to complement their instructional materials. Word of mouth, sometimes called "networking", is a sharing of resources by teachers, principals, and educators in other schools. They know people and programs through professional associations, conferences, journals, and newsletters.

Even well informed educators will find themselves limited if they use only commercially published materials and networking. Billions of dollars at the local, state, and federal levels have gone into developing curricular materials and instructional programs. School staff should learn about these resources and use them in selecting new programs.

Dissemination networks exist both nationally and in many states to let schools know about various kinds of resources. In many states, departments of education employ a process to identify, validate, and disseminate (IVD) exemplary programs that were developed in schools within the state. The National Diffusion Network exists to make validated improvement programs available through a state facilitator located in each state.

Curricular and management programs have been developed on the basis of research and field testing at federally funded laboratories and centers. In addition, there may be universities, private agencies, or other resource developers that should be explored.

Information centers exist in many parts of the country, both as independent agencies and as parts of an intermediate service agency, state departments of education, etc. Such centers have access to ERIC and other sources of literature. While they do include some programs, they primarily house papers and articles that can provide background information or ideas to the school.

Developing criteria

Once a variety of possible programs has been identified, the linking agent works witn school staff to develop criteria for analyzing the programs. These criteria are used to help the school staff select a program that resolves the identified problem and that can be effectively implemented in the school.

Costs of potential programs will be among the earliest criteria to be identified. When considering cost, it is important to identify start-up and on-going expenses. For example, will the program involve new materials, or teacher training, or new personnel? If training is involved, will the district need to budget for substitutes or teacher stipends? It is important to know both the costs associated with the programs and attitudes about money in the district. Some districts are willing to pay large sums for materials; others may prefer to put their money into staff development.

There are less tangible, but often more significant selection criteria, that may be used related to the goals, philosophy, and norms of the district. These criteria are often difficult to articulate, but the linking agent can encourage such self-examination by local school people. Some of these criteria include: teaching styles, instructional grouping patterns, types of materials, and student learning modes. It is important to identify preferences and to make sure that communication is clear. It doesn't matter that everyone agrees that "individualization is important" if there are six different interpretations of what individualization means. It is important to make certain that various groups in the school affected by the proposed change agree on the criteria for the new program. If only the administrators have agreed on the criteria for a new elementary science program, the chances are slim that science teachers will eagerly implement it. Another important consideration in developing criteria is to evaluate how the proposed program will fit in with the rest of the curriculum. Look at the grade levels before and after the grade level that will be involved in the program. Examine other curricular areas to see if and how they will be affected.

Selection criteria should be developed before examining the programs. They help the school staff to identify the goals of a program before seeing what is available. They provide a clear standard by which all programs can be judged. Developing criteria in advance helps staff to identify their ideal program before getting distracted by slick packaging or by the personality of the program representative.

It should also be noted that the criteria developed at this point are not immutable. They are subject to change as discussion proceeds and as programs are examined. The school may decide on modifications in order to achieve other priorities. It is an evolutionary process that permits continued recyling.

Analyzing programs against selection criteria

The school staff should, at this point, develop a method for applying their criteria in analyzing programs. They might consider weighting criteria, for example, so that the more important standards count more heavily. In any case, a scoring system needs to be developed to use with the programs selected for analysis. More than one person should judge each program in order to provide a cross check or face validity to the analysis. Raters might be organized into teams of two or three or might consecutively rate programs so that each is seen by several different people.

Often there is a reaction to form rather than substance, and the linking agent needs to help the group evaluate carefully when considering professionaly-packaged versus home-grown programs.

Looking at the programs at this point will probably mean looking at artifacts of the programs -- written descriptions, brochures, sample materials, guidebooks, etc. Very often, it is hard to get a clear sense of the program from print materials. However, by using the criteria, several clearly inappropriate programs can be eliminated. People can check on each other to make sure that eliminations are made for sound reasons and that information is complete.

For the remaining programs, questions that need answering should be identified. Perhaps additional materials are needed that provide more information.. Perhaps a phone call could be made to the program developer or representative. Films about the program are informative; so are presentations and observations of the programs being used in other schools.

Gradually the group will be narrowing its choices by gathering more and better information. The best test of a program is to see it in action and to talk to users. It is easy to be discouraged by adoptive teachers who are dissatisfied with the program; their reasons for dissatisfaction may not be yours.

The linking agent in this stage plays an important role in providing balance and objectivity. The groups will hear developers "pushing" their product and brushing aside any obstacles -- or will hear about all the the problems of a given program by implementers who were forced to adopt or are given inadequate support. The linking agent can help the group to probe and look objectively at the qualitites of the program and how it would work in their district.

Making a decision

Eventually, the group must make its choice. If the process has been a careful and deliberate one, the choice point may, by now, seem agonizingly long in coming! It is important to remember that care taken in making the decision will bear fruit in implementation.

Along the way, there should have been checks on how the decision for a new program will be made. Everyone needs a clear perception of their role. Are the people involved a decision-making or an advisory group? What is the role of the faculty at large? Will the superintendent make the final decision or abide by the group's choice?

The linking agent must raise these issues periodically, must remind people of their agreements, and must develop strategies to ensure that everyone is informed and involved appropriately at each step.

An issue of procedure -- or how the decision will be made -- will be raised in addition to the question of who will make the decision. Will there be a vote with plurality decision, or is consensus desired? A plurality decision that a substantial number of people oppose may cause roadblocks in the way of successful implementation. It is important to reach a decision that is suppported widely or, at least, not actively opposed by a significant group.

When the decision is made, care should be taken to publicize it well. If the decision is made by staff, it may be helpful to make a presentation to the school board; this depends on the size of the district, the importance of the program in the district, and political factors. Press coverage should also be considered; care should be taken to describe the chosen program carefully, as well as the process and reasons that predicated its selection.

After the program is selected, the linking agent and other involved school district staff begin the careful process of implementing the new program.

THE SCHOOL'S JOB
Getting More People Involved – The Selection Committee

EPIE Institute

It seems now to be generally agreed that selection of instructional materials is a teamwork job; not only is it too big for one or two people working alone, it also benefits from the stimulation of variety. More important, it is valuable for all concerned points of view to be heard and for all concerned groups to be informed about what is available for the purposes to which selected materials will be put. Not to be overlooked is the good effect on application, interest, and morale of using an item one had a hand in selecting.

Broad Representation

Therefore, not only teachers and administrators should serve on the selection committee, but students and parents as well, and in some cases perhaps other members of the school community. The committee will profit from membership of, or consultation with, specialists of various kinds. Someone with specific training in measurement and evaluation must certainly help with the selection process; curriculum and media specialists can add a valuable dimension, too.

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Of course there are dangers in "a committee approach,:" but in this as in other cases the dangers can be avoided by careful organization and thoughtful leadership. Often for instructional materials selection committees the leader is the principal; sometimes it is a teacher or a curriculum specialist or a department head. The leader will want to make sure that the committee understands its position within the school or school system organization, that it comes to consensus on its operating rules and schedule, that lines of authority are entirely clear, that individual and collective responsibilities are defined, that provision is made for support (clerical, administrative, professional) of the committee -- considerations he will have taken into account in ensuring effective committee operation in any situation. In this special situation he also must see that the committee understands and works within any content coverage or purchase constraints set by law or by edict in the school, the system, or the State. He may also have to make arrangements for input from and output to the school's wider public -- the town, the neighborhood, the parish the school serves.

A special note here about teachers and selection committees: service on such committees is too often something teachers are expected to do in their spare time, and perhaps at some expense to themselves. Selection is too important to be treated that way, and until it becomes an equal partner with the other demands on the teacher's time -- teaching his class and preparing his lessons, conferring with parents and students -- it must be an activity for which the school makes arrangements, seeing that the selector's classroom is covered and that his expenses are paid.

Training

One more point about committee members concerns training for the selection job. Such training is almost unheard of; there have been a few workshops on the subject, and papers, pamphlets, and guides appear with increasing frequency. Committee leaders will find the selection process smoother and more efficient if they will spend some time with the committee discussing how selection should be accomplished, including in the discussion a practice evaluation session. Such sessions reveal differences among the committee members in approach to the task, and make it possible to resolve those differences before work begins. They also do much to point up the inaccuracy of a number of accepted conventions about selection -- for instance, that reading the teacher's manual will reveal whether a student workbook does its teaching job well.

Specific training -- brief but important -- may be needed in simple evaluation techniques. The evaluation specialist on the committee is the person to undertake that training, perhaps for only a few of the committee members, those who will be directly involved in the committee's measurement activities. Certainly the measurement specialist should have an opportunity to foster in all the committee members a positive orientation towards evaluation: a healthy skepticism about claims, which leads to a search for supportive information; a concern for impartiality; a sense of the necessity for objective information as a mold for and a brake on subjective opinion; an insight into the differences in information sources which can affect the validity, the reliability, and the comparability of information; a realization that goals govern evaluation design, together with an appreciation that varying goals may all be worthy goals. Such an attitude should underlie every task the committee undertakes, from the establishment of criteria to the final selection.

A final "offsides" comment about selection committees: The discussion throughout has assumed that the committee is selecting for a school, or perhaps for a school system. There is much to be said for much wider responsibility for, and therefore representation on, the committee, where goals and schedules are compatible. The final decision, of course, must be made by each individual school, but the selection process will be much less burdensome if groups of schools share the time-consuming job of reviewing materials in the light of generally applicable criteria.

EXPLICIT STATEMENTS OF CRITERIA

A systematic statement of criteria, cooperatively developed, is a remarkably useful tool. The very development of the statement helps to make the bases for selection explicit to all. Use of the statement as a basis for developing evaluation procedures and tools can ensure thorough evaluation of each item under consideration-and permits selectors to defend their choices when review time arrives. Moreover, successive statements supply subsequent selectors with a valuable historical record, particularly useful when change is comtemplated.

Goals. Basic to the selection process and therefore to statement of criteria are goals -- the overall goals for the school and the specific goals for all material to be selected. And basic to the statement of goals is the point of view, including pedagogical approach, which defined the situation for which selection is being made.

Overall school goals deal with major pedagogical themes:

recognition of individual differences, inculcation of personal and social values, attention to equitable treatment of minorities, necessity for comprehensive curricular coverage, desirability of sequential progress through the curriculum, encouragement of independent research, provision for other than print media, and such matters. It is becoming more and more necessary that such goals be hammered out, written down, and made explicit to the school's staff and its public. Certainly they are basic to all school planning, not just materials selection, and in this day of increased interest and involvement in public affairs by all manner of groups and individuals, it is valuable to be able to publicize just where one stands on certain basic points before anyone feels it necessary to ask!

Specific goals for the materials to be selected must define in concrete terms what must be taught, in the light of how it fits into the overall curriculum and who will teach it to whom and how. Content, target population, curriculum sequence, etc. are obvious descriptive facts which must be spelled out, but they must not be allowed to outweigh entirely considerations of style, background, and interest. A text that encourages student exploration will be of little use to teachers who wish to or are expected to direct student activity very carefully. Students looking for ideas for the Westinghouse Science Talent Search will not find much in a film which would do a very good job of explaining photosynthesis to secretarial students.

Determining and Specifying Goals. The selection committee must perform a critical analysis of local programs, resources, and needs in order to be able to express successfully the goals of selection.

The school administration is the primary source for information about program -- the major pedagogical themes mentioned earlier, such as comprehensive curricular coverage, recognition of individual differences, and such matters. It may well be that the committee will be supplied with official statements of policy on these matters before work begins.

When it comes to resources, too, some information may be readily obtainable -- for instance, descriptions of currently available materials with which new materials may interact. About human resources, information may be harder to come by. There may be considerable discussion, for instance, of pedagogical style and methodology.

Yet differences in style may dictate the selection of two rather than one basic program for a given curriculum segment. The same materials may satisfy a "pupil-discovery" teacher and a "lecture-discussion" teacher, but it is by no means certainly so, even though their outcome objectives may be identical.

Local needs are, of course, the reason for selection committees in the first place. They too, however, must be recognized and explicated, to a large extent as outcome objectives -- what teachers and students want to have happen because of the use of the materials being selected.

For clarity and usefulness outcome objectives, and just as many descriptive facts as will fit, should be stated in behavioral terms which can be translated into points to look for in examinating materials -- what a person can do, not what he thinks or feels. A statement that when he has completed the materials the student should be able to describe the steps Congress takes in resolving indecisive Presidential elections can be translated into points to be looked for in examining materials. A statement that a student when he has completed the materials must comprehend the significance of the relationship of the Congress to the Executive Branch is not so translatable. Even less measurable are the all too frequent statements of the sort that "the aim of the course is to establish the student as a good citizen by having him appreciate the value that built America." There is probably no way in which a textbook or other instructional material can do that job even if one is clear as to what the job is, and certainly there is no specific point to look for in a book or a film to find out whether the job will be well done.

What characterizes, then, behavioral statements of goals is that they say in so many words what a person must be able to do about, with, or as an effect of the materials under consideration. "The student can describe," not "The student understands." "The student can contrast," not "The student appreciates." The very act of specifying such goals can be valuable in defining and clarifying just what it is one wants to do.

Criteria. The selection committee is now ready to write its statement of criteria. Such statements are likely to be long and detailed. They are, for the most part, thorough explications, again in behavioral terms where possible, of what materials must make possible for teachers and students in order to assist in meeting those carefully defined goals. An example of how one school might organize its criteria appears on page __ as "Criterion Check List." The List is suggestive, not exhaustive -- each school's requirements are different.

Several levels of criteria can be identified. The simplest, which might be called descriptive criteria, concern such matters as course and grade level, cost and other purchase constraints, recency of the material, availability of assistance in implementing the material, and coverage of subject matter (a question of whether the concept of pi is covered, for instance, not whether it is covered in the desired manner, a point which must be considered in detail further along in the selection process). Included here too can be questions about the origins of the materials, such as the producer's and/or the author's qualifications for producing the materials they offer, as well as provisions for examining producer's claims for materials.

Another level of criteria has to do with the instructional setting in which the material will be used. Questions of pupil and teacher characteristics and school and community characteristics which must be accommodated comfortably must be answered: Is the material designed for pupils whose interest and achievements match those demonstrated by the pupils for whom materials are being selected? What about their socioecomonic, geographic, and ethnic orientation? Are the demands on the teacher too great for one who has a number of other types of lessons to prepare for, but interesting and challenging for one who teaches this material to various groups of students? Does the material require physical facilities and scheduling which are not possible in this school?

Then come the more subtle criteria -- questions of aims, approaches, strategies, methodology, rationale, point of view, scope, pacing, and such matters. A valuable exercise early in the selection process is a thorough discussion of these criteria to make sure that the members of the selection committee come to agreement about what they are looking for -- these are not cut-and-dried matters. Will these arithmetic materials demonstrate, by rote, how to find the area of a circle, or will they encourage students to discover how to do the job? Do these general science materials put too much of a premium on reading? Are these materials so organized that a relatively inexperienced teacher who is not a specialist in the field can help students use them effectively?

Of course, the final, most important, criterion is effectiveness -- whether the materials have demonstrated empirically that they will fulfill the goals set for them. Opinion about effectiveness is helpful, but it is rarely conclusive. What is needed is actual evidence that students' behavior was changed in the desired direction because of use of the materials. The selection committee will want to call on the evaluation specialist in formulating the standards of effectiveness which materials must meet in order to be retained in the pool of materials to be considered; this is one of the technical matters which makes his presence on the committee essential.

Criterion Check List.

I. The Producer
  A. Credentials
    1. Author's education and experience
    2. Reputation-public and local
  B. Claims for the material
    1. Backed by trustworthy evidence
    2. Based entirely on "expert opinion"
II. Administrative Requirements
  A. Schedule
    1. Fit to school year organization, including possibility for adaptation
    2. Fit to school day organization, including possibility for adaptation
    3. Lead-in time needed for pilot use, training, etc.
  B. Budget
    1. Initial cost, for materials and training
    2. Ongoing costs, for expendables, replacements, additional training, etc.
  C. Personnel
    1. Additional specialized needed
    2. Additional nonspecialized needed
    3. Schedule and budget for training as required
  D. Space
  E. Legal Constraints
III. Curricular Requirements
  A. Age, grade, ability level
  B. Subject matter content
    1. Selection and arrangement
    2. Scope
    3. Sequence of presentation
    4. Point of view, including treatment of minorities, ideologies, personal and social values, sex roles, etc.
    5. Media of presentation
    6. Necessity for supplementary materials to complete presentation

IV. Pedagogical Requirements
  A. Instructional setting
    1. Suitability of socioeconomic, geographic, ethnic orientation
    2. Student interest, achievement, learning style
    3. Teacher characteristics
    4. Suitability ofphysical space for recommended implementation
    5. Fit of recommended presentation into standard schedule

- B. Teachers
    - 1. Necessary background
    - 2. Pedagogical style
    - 3. Teaching schedule and load and other school responsibilities
    - 4. Provision for special training
    - 5. Necessary for supplementary personnel
        - a. professional
        - b. lay
- C. Methodology
    - 1. Fixed or flexible?
    - 2. Specified in detail or implied in materials?
    - 3. Compatible with what view of how learning takes place?
    - 4. Pupil-centric or teacher-centric?
    - 5. Individual, small-group, large-group, or some combination?
    - 6. If individual, programed?
    - 7. Heuristic or didactic?
    - 8. etc . . .

V. Evaluation Requirements

- A. Method for assessing outcomes of instruction and learning
    - 1. Self- or teacher-administered and scored?
    - 2. Descriptive objective?
    - 3. Norm or criterion as reference?
    - 4. Diagnostic?
    - 5. Prescriptive?
    - 6. Frequency of measurement and reporting
- B. Learner verification of effectiveness
    - 1. Producer's empirical evidence
        - a. Developmental testing reports
        - b. Reports on field testing of final form of materials
        - c. Evidence of collection of feedback on materials in use
    - 2. Reports from other schools
        - a. Statistical
        - b. Anecdotal
        - c. Direct, or through organization like EPIE
    - 3 Results of local pilot use
        - a. Statistical
        - b. Systematically observed
        - c. Collected by questionnaire
            - i. from teachers
            - ii. from students

- d. Anecdotal
  - i. from teachers
  - ii. from parents
  - iii. from students
  - iv. from other sources
- 4. Results of follow up during operational use
  - a. Statistical
  - b. Systematically observed
  - c. Collected by questionnaire
    - i. from teachers
    - ii. from students
  - d. Anecdotal
    - i. from teachers
    - ii. from parents
    - iii. from students
    - iv. from other sources

APPLYING THE CRITERIA

The major work of the committee now begins. They must make arrangements to obtain information not only about what is available but about what descriptive and evaluative information about available materials they can get from outside sources. They must plan for obtaining actual materials for appraisal when they have narrowed the field to "possibles." They must look ahead to the time of trying the most likely materials with teachers and students.

Basic Information Sources. The obvious source of basic descriptive information about instructional materials is the producer, and good relationships with representatives of highly regarded publishers, producers, and manufacturers will mean that many important educational materials will come to the school's attention -- but not all, and collecting all those separate bits of information is a chore. A comprehensive descriptive listing of all available materials for a given purpose is easier to use and may prevent a school's missing good items produced by small companies with small sales forces and small advertising budgets. Several sources of descriptive information exist:

- There are directories or collections of catalogs. Some of them, it should be noted, are supported by producers and are less than complete and unbiased.
- Reviews and listings appear in general periodicals, in professional journals, in yearbooks and special bibliographies.
- "Guides to the guides" supply listings, sometimes with descriptions, of catalogs, bibliographies, and

periodicals which are useful in the selection of library books and nonprint media materials.

- EPIE supplies descriptive information also, in a format much easier to use than separate pieces from each producer. EPIE listings contain tables of comparable information about all the items, from all producers, available for a given purpose. One bit of information included is whether the developer does -- or will -- supply field test or other study data about his product.
- An increasingly common source of information, particularly for supplementary materials, is a central collection of materials -- an instructional material center, an education media selecton center, or similarly named facility -- where one may examine materials and discuss them with a curriculum specialist.

Examination and Review. The first evaluation step for the committee is examination and review of materials. The purpose of examination and review should be to select materails for further evaluation of an empirical nature, not to make final selections. We have in the past assumed that materials examined and judged acceptable as to content and approach will also be effective learning tools. They may be, yet research indicates that examination of materials is an unreliable way to judge their learning effectiveness. For instance, in one study a principal and a group of teachers were asked to rate for learning effectiveness alternate versions of materials for which empirical evidence of effectiveness had been collected but not disclosed. The educators' ratings had a correlation of -.75 (yes, that's a minus) with the empirical measures. A replication of the study by another researcher produced similar results. But practicing educators have not taken much notice of findings of that kind; they are often impervious to research results, particularly those which speak to an area in which they have not yet recognized that they have a problem. They are more and more aware now of the selection problem, and of the fact that examination and review alone have not offered a solution to it.

Then, to meet the demands which the greatly expanded supply of materials puts upon school decision makers, our examination and review procedures should be refined and systematized. To ensure that examination is thorough, and that observations are reported in comparable terms, the selection committee may want to devise evaluation check lists or questionnaires, or, if professional evaluators are available to help, carefully constructed and weighted rating scales. Good forms greatly facilitate the selection process; they make it possible to summarize and compare committee opinions, and provide useful records for reference. The selection committee will do well to translate its statements of criteria into a set of appraisal forms, a series of hurdles which materials must negotiate in order to stay in the running for final selection.

Descriptive criteria can be expressed in concrete terms and therefore used to make the first quick cut through the list of available materials so as to reduce it to a manageable size. A good way to ensure thorough investigation on these points is a yes-no check list -- one which can (almost always) be completed on the basis of descriptive literature, from the producer, from EPIE, from summary catalogs and collections. The check list might well be in order of agreed-upon priorities, with the most important considerations first; if the reproduction system is not covered in the basic physiology course, there may be no reason to investigate the material further. Certain descriptive criteria may be absolute in a way that more subtle ones cannot be.

Materials which survive the descriptive criteria cut might be checked against another check list, or a questionnaire, based on criteria having to do with instructional setting. Instructional setting questons can usually be answered by reference to reviews (such as those commissioned and reported by EPIE) or manuals or teachers' guides; they are rarely covered in producers' literature, but usually they can be answered without a detailed study of the materials themselves. The match between the school the author envisioned and the selecting school will never be perfect; profiles of instructional setting characteristics will help to show what may be possible in the way of supplementation or adaptation.

Information about materials' effectiveness for the job they were designed for is, unfortunately, rarely available from sources outside the school -- the producer, or other schools which have used the materials. When it is present, it can be used early in the selection process, again by means of a questionnaire or a check list. Such facts as how many and what types of students the materials were used with, and how outcomes were measured with what results, can be recorded as are descriptive facts. The information can be very revealing if used with care; here the evaluation expert will be very helpful to the committee. Outstanding evidence that material really does its job can outweigh some factors which may have given members of the selection committee pause. It is important that the evidence be pertinent to the goals and the conditions of use guiding the committee's choice. Very rarely will the conditions under which a producer tested his materials, or a school used them, match exactly those in the school making a selection. The differences in students, teachers, conditions, must be noted and assessed; they may modify one's reliance on the resulting information.

The more reports there are, of course, the more chance there is for a match, and similar reports from disparate sources might justifiably be extrapolated to one's own situation.

Analysis of Instructional Design. When it comes to applying this subtle criteria of content and coverage, methodology and rationale -- in short the instructional design of material -- a simple check list or questionnaire is not likely to suffice; the committee members will want to devise a more probing form, perhaps a rating scale or a questionnaire which allows for qualified answers rather than just "yes" or "no," and which permits recording of observations. It is almost always necessary to study the materials themselves in detail to find out how they measure up to these subtle criteria, even if there is a detailed analysis of a potential material available from an impartial source (such as one of the analyses often published by EPIE, made by subject-matter or learning-theory experts on the basis of an extremely thorough, comprehensive examination of every aspect of an instructional package). Sometimes the testing of the materials against these criteria is done individually by committee members, sometimes by the whole group in consultation with producers' representatives. Whichever way, the evaluations probably always should lead to discussion. It is inevitable that materials which are still under consideration at this stage will require some joint committee attention to ensure thorough agreement about how they seem to fit into the school's program and what steps to take next to lead to a final decision.

In the (likely) absence of detailed analysis reports, the committee may want to incorporate into its procedures all or some parts of an instrument, often used by expert curriculum analysts in preparing evaluation reports for EPIE. The instrument guides its users in an analysis of how a producer deals with four aspects of materials design: stated objectives, scope and sequence, methodology, and provisions for evaluation. The instrument is flexible, with space for listing the most common alternatives; it abounds in space for open comments "(Please specify)" and asks questions which require statements of opinion. Each of the five sections (one for each aspect and an overall one) ends with a rating scale -- seven points, spread across three sets of statements which necessitate real thought about the characteristics of instructional material under discussion.

Writing Appraisal Forms. The committee will find, when it comes to writing all those appraisal forms, that it will not be too difficult if goals and criteria were worked out carefully. Schools, libraries, curriculum centers prepare them all the time; here are some hints, based on a review of ones which have already proven themselves:

- First a special caution: appraisal forms are not tests and scores should not be the end results. If scores were used, two books might receive the same score, one because it was attractive visually though quite inaccurate as to facts, the other because it was very accurate but also badly printed, ugly, and hard to read. A "profile" of responses to the items on an appraisal form is a much safer guide than a score.
- The selection committee should prepare instructions which its members will follow. Almost any point is open to more than one interpretation, and it is important that the committee come to agreement on each point and take steps to ensure that members bring the same understandings to their examinations of materials and their integration of information about those materials. Only then can results for many instructional items from several committee members be compared.
- The most useful forms are designed to help the user make a good appraisal instead of leaving him floundering about, wondering what he should look for and what he should make of what he sees. For instance, instead of merely asking for a check mark to indicate whether a teacher's manual specifies a methodology, a form might ask questions about specific aspects of methodologies: Are lessons planned in time sequence? Are suggested procedures easy to follow? Is there special emphasis on probable problem areas? Are supplementary drills, discussion questions, and outside activities suggested?
- One might stretch the appraiser's perspective by asking him to respond in the context of comparison: Is it important to buy the color version of this film? Will this tape hold the student's interest better than a lecturer would? Is this new film so far superior to the one on hand that it should be substituted for it?
- The committee should provide for some indication of the relative importance of the criteria. With careful thought and discussion, priorities can be assigned, allowing for some flexibility in dealing with priorities so that tradeoffs can be made. It may often happen that a surprising and totally unexpected feature will turn up which justifies ignoring some previously important criterion.
- A reminder is in order here about the value of stating goals in behavioral terms so that there will be points

to look for in checking out instructional materials, to see whether they are really designed to help students learn what they are expecting to learn. If goals are stated behaviorally, that part of the appraisal form writes itself, so to speak.

- In the quest for a rational system and organization, one sometimes forgets the vital importance of open-ended comment -- for successful appraisal and for the responder's morale. For instance, if one asks a teacher to rate from "superior" to "poor" a film's capacity to stimulate classroom discussion, what will he say if he finds the film presents its case so outlandishly badly that discussion will be full, lively, and productive? A little "Why?" or "How?" under the rating scale would help him show just how the film would fit into the instructional scheme.

Pilot Use and Testing. Eventually, with assiduous effort and any luck at all, the selection committee gets the list reduced to a few very promising materials. That is when learner verification, beginning with pilot use and testing, is in order. No method of judging materials has ever been devised which is more effective than actual use with students, and no final commitment should be made until that step has been taken. Even in an artificial workshop situation it is possible to see differences between the results of very careful analysis and those of actual trial. In one such workshop, participants used the instrument for assessing curriculum materials described earlier to examine a somewhat complex educational game which deals with ecology. They worked in groups simulating selection committees and came up with detailed analyses based on facts in the instruction booklet for the game and observation of the playing board and the many pieces. They then began to play the game, or to attempt to play it and to change their ratings of it and of its explanatory material.

Instituting the pilot use of materials in a school, with proper provision for pre- and post-testing and for matching control and experimental student groups and teachers, is a task for specialists; it can only be described briefly here. It is important, however, that the selection committee decide just what questions they want the trial use and testing to answer, and just how good the materials must be to be selected -- in other words, the effectiveness criteria which materials must meet. The committee's questions will govern the nature of the trial procedures developed by evaluation specialists.

The plan can be elaborate enough for a whole curriculum or simple enough for a single-concept film loop. (Read about Competitive Partnership on page 21.) In classic cases it consists of using trial materials with one group of students and well-established ones with a comparable group, and then comparing the two groups' performances on the same measure of "criterion mastery"-say a commerically available standardized test of the skill or subject being taught, or perhaps a locally developed test which is kept independent of the two learning sources. In other cases tests of knowledge or ability are given before the students study the new material and after, to see what they have learned-if anything.

Worth mentioning here is a new "achievement test for media" (Full information about the achievement test developed by J. H. Bond of the Syracuse City School District, is available from EPIE Institute.)

which measures the extent to which various attributes of fims, filmstrips, and other such materials influence desired or designated behavior. Such attributes as length, target grade level, vocabulary level, skill level, achievement gain, and command of attention are comparably measured for various items and plotted into profiles which greatly facilitate comparison among thoses items. The most elaborately devised index is that of achievement gain, which is based on pre- and posttest use of questions designed to measure the extent to which the instructional item meets a given behavioral objective.

Pilot students and teachers must be carefully described, and outcome behaviors must be carefully defined. If they are, pilot use and testing can give the school system empirical evidence of how well an educational item will teach. It can show, for instance, that a given book is very effective in a small, highly motivated class taught by a teacher with advanced study in the subject matter, but that it is much too hard for the typical student to understand. It can demonstrate that the beautiful book, full of four-color illustrations, maps, and cut-outs to use in model-making, fails to impart the necessary lore as well as the small brown textbook with the closely marshalled facts and the straightforward presentation. It can show us that a certain film adds to a slow student's knowledge because he is allowed to view it on his own schedule and stop and repeat portions as he wishes. It can point out areas in which the materials do a particularly good, or a particularly bad job. It can help in the appraisal of a particular methodological approach.

A vital part of pilot use is the experience everyone gets with materials, at least some of which will soon be in general use in the school. Results will not only indicate overall effectiveness but also strengths and weaknesses. They may point to special considerations in the use of the matierals, or special situations in which their use should be avoided-or vigorously promoted. They will reveal other, less objective but equally indicative, information-student and teacher reactions and "affects" are cases in point. Also, faults which are not visible during "armchair analysis" may come to light in trials-as may unexpected excellences.

One aspect of pilot use certainly should be observation of potential material at work; what actually happens in the classroom may color one's interpretation of all other information about the materials. Perhaps it is unnecessarily elaborate-there have been very effective multi-media kits in which, in practice, teachers and students get all they need from only one medium. Perhaps teachers approach the materials quite differently from the way the authors recommend or expect -- because of personal preference, or unclear instructions, or conscious decision that the authors' approach is inappropriate.

How teachers and students use the materials can be the subject of systematic classroom observations. Equally important is what they think about materials, and here again questionnaires are probably the best way to get complete consideration and comparable responses. Even more important is the need to give these pilot users opportunities for open-ended comment. It may be a good plan, too, to give students a chance to respond anonymously, and to by-pass the teacher in responding.

In short, trials add to the fund of information about a product; one cannot know too much about materials when it comes time to start using them. And trials can contribute to expansion or revision of responses to criteria applied earlier, or even to the refinement of the critieria themselves, to facilitate the next selecton process. Any procedure improves with experience!

Implementation and Follow Up

When all the evidence is in, the committee will be ready to make a selection. They may be fortunate enough to have clear-cut evidence of what to do but it is more likely that weighing and sifting will be needed. Often the committee will be required to account for their selection to the public or school authorities or both. Organizing information for decision making will also organize it for such eventualities. The effect which public or authorities can have on final selection varies from situation to situation. Usally carefully laid groundwork and thorough procedures make acceptance automatic. (But see the report on this page of a special situation in regard to textbooks.)

The Detroit Study of Treatment of Minorities in Textbooks

A special case of systematic evaluation and review is worth reporting, not only because it comes to grips with a problem of increasing importance but also because it is an expample of successful cooperation between schools and producers.

In 1964 the Board of Education of the City of Detroit instituted an additional step in its textbook selection procedures. After a selection committee makes its recommendations, the Department of Intergroup Relations makes careful analyses of recommended books in terms of twenty criteria developed by the Department. The criteria require positive (rather than mere absence of negative) treatment of minority groups. The evaluators are required to say whether, in its text and its illustrations, a book or curriculum material shows fully integrated groups, shows members of minority groups in positions of leadership, analyzes intergroup tensions and their causes fairly, and shows the contribution of members of minority groups to American life, to name a few. The results are reported to the Superintendent to Schools for his use in recommending books for adoption to the Board of Education.

Since so few of the textbooks available were found to meet the criteria used in evaluating books for the Detroit Public Schools, the staff invited representatives of major textbook publishing companies to meet with them to discuss the situation. According to the report on the procedure prepared for the U.S. Senate Permanent Subcommittee on Investigations, the meetings "appear to have been promising and fruitful. Promising, because some publishers indicated that their meeting was most helpful 'in shaping our thinking for the days ahead.' Fruitful, because a number of publishers' representatives offered to make specific changes and improvements in their textbooks. Some of these have already been made."

Sharing Information

Another outcome of the process can be the sharing of information with others who would find it useful. A good channel for disseminating information to other schools is EPIE. Schools which send results of pilot testing and classroom observations to EPIE can count on their being shared (anonymously, of course) with similar schools which are selecting for similar purposes. It is a good idea, too, to offer the information to the producers of the materials tested. They may also be interested in summaries of responses to appraisal forms, to show what the committee found or failed to find in the materials to satisfy the demands they were making on them. Empirical information of this kind should have a significant effect on the producer's plans for revision and even perhaps on his overall approach to the development of instructional materials. Of course he needs information from a variety of schools, but carefully developed information for one school with clearly defined goals and conditions will be an enormous help.

Acquainting the public with materials

In order to implement their choice under favorable conditions the committee will want to give parents, students, and teachers an opportunity to hear about it and ask questions about it. Pilot-use teachers, students, and parents can be very helpful in this orientation task. The most extensive and formal approach must be to the teacher, who may have to spend considerable time and energy in training sessions, workshops, and lesson preparation. Frequently the producer includes training as part of his instructional package -- that point was probably checked early in the selection process.

Continuing learner verification

Of vital importance are plans for continued learner verification. The committee will want to know how their selections work out, whether students do indeed learn from the materials they selected. If not, of course materials must be changed or their use modified. But maybe selection procedures can be improved, too: What points did the committee miss which would have indicated the inadequacies which showed up in operation? What parts of their procedures led to their error?

Follow-up testing and observation, and requests for student and teacher opinion, are tried-and-true methods here as in pilot use and testing. What is done with results is similar, too: not only changes in materials and procedures but also sharing with schools through EPIE and with producers. The ultimate goal is good learning; vital to success is good material; vital to good material is revision and refining and planning based on how well material meets the goal.

Two Pilot Studies

The Media Center as Curriculum Resource

A medium-sized school system on the East Coast has just about abandoned the use of single textbooks as a somewhat surprising result of its plan to make libraries available in every elementary school and to give in-service training in library-media center use. Implementation of the plan prompted teachers to ask to review the school system's curriculum. Accordingly, a plan was establised to do just that and to install new curricula, under the supervision of the school system's Educational Development Center.

Under the plan, research committees now investigate current curriculum trends to define basic objectives and to work out the scope and sequence of topics to be covered. Then a larger faculty committee defines a program in more detail and makes suggestions for implementation, grade by grade. In due course a "pilot school" tries the program for a year. A year-long program of workshops ensures that all teachers are informed about and contribute to the new curriculum development and keep up with suggestions as to methods, media, services, and activities. After the pilot year, the new course is introduced to the whole school system with whatever revisions it requires-or abandoned, depending on the outcomes.

One basic outcome of this cooperative curriculum development has been the substitution of a variety of books and other media for the signel textbook. Media for use in implementing the curricula are basically teacher-selected. Suggestions are made by committees and by pilot school faculties, and sessions are held to introduce teachers to new media available. But in the long run the teacher is the final arbiter of what will be used in his classroom.

The school system maintains a large collection of media for teachers to choose from. Most of the items are housed in individual school libraries but centrally cataloged to allow system-side use. A teacher may ask to have the collection augmented to fit his needs. Indeed teachers are encouraged to suggest additions to the media collection. A good start is made during the pilot year. After new curricula are in operation, teachers may ask for materials for review and collect student opinion of the item as well as judging it for themselves. They record preview results on a form which the Educational Development Center files for use by teachers who later may consider reviewing the same material. In the case of films, it is sometimes possible to have system-side "film shows" where concerned teachers can see and make comments on numbers of films. The basic library collections are maintained by library specialists, but special books are added by a process similar to that for media.

Shall We Try This Medium?

Not all pilot use has to do with content. It is also a fine method of discovering whether a medium is an effective teaching tool for the group one is responsible for. An instructional resources center in the Southwest did a careful trial run to see whether to add Super 8mm film loops to its collection. They asked the users-teachers and students in five schools-to comment on the effectiveness of the medium in general, not the content. A large collection of loops was lent by producers for a whole semester, to ensure a thorough trial.

The trial run teachers had had no experience with film loops and had little idea of what to expect from them. To give them some background, the study director supplied descriptions to help them categorize the loops into the "inquiry" class, the "demonstration" class, the "physical skill developers" class, and the "cognitive skill developers" class. He suggested applications for each type-small group seminars for one, individual practice for another, concept clarification for a whole class for a third. He also told the teachers exactly what questions they and their students would be asked about film loops as a teaching and learning device when the semester was over.

The questions were written in recognition of the fact that the users' opinions would be subjective, not "scientific". Student ratings dealt not only with the overall impression but also with whether the loops made them think or bored them, whether the absence of sound bothered them, whether the loops should be used in classes or put in the library to circulate. Degrees with the rating scales for students kept their vocabulary in mind:

5	4	3	2	1
I liked them very much	I liked them at first but as the novelty wore off not so much	They were OK	I didn't understand them	They were no good

Questions to teachers were considerably more comprehensive. They had to report on how and how often the loops were used as well as rating their "personal reactions" to the effect of the loops on their classes. They were asked to rate how successfully the loops made their points and whether the system operated smoothly. Finally they were asked to answer in writing these questions about the possible impact of loops on the status quo:

1. Did the loops require a change in your teaching techniques? If so, how?
2. In your opinion did the results justify the change?
3. Do you feel that the film loops offer more teaching possiblities than filmstrips?
4. Is the lack of sound valuable in allowing you and your students to discuss freely what is shown, or is lack of sound a drawback? Please comment.
5. If the film loops are comparable in price to filmstrips, would you feel that the loop system would be a valuable addition to your teaching?
6. Do you feel that groups of loops, arranged in kit form, should be a circulating item in the regional library, or from your experience would they lose value if they had to be ordered 10 days in advance and kept only one week?

On the basis of responses to the survey, film loops have become a much-used part of the central instructional resources collection.

Competitive Partnership

The District of Columbia Schools have devised an elaborate and ingenious pilot use and testing scheme for reading and arithmetic materials. They have offered producers (three, in the area of reading, and eventually probably at least that number in arithmetic) an arena in which to pit their materials and programs against one another-with full cooperation from their "partner" schools. Each reading materials producer will be responsible for seeing that about 5,000 D.C. school children learn to read up to grade level as measured by standardized reading tests.

That may sound like the late, little-lamented, performance contracting scheme. But competitiive partnership cuts out the least successful aspects of performance contracting while retaining the important element of the producer's accountability for his materials. The producer is given not only clearly defined goals to meet, but adequate time (and money) to train teachers to use his materials so that they can meet the goals. The school cooperates full in his plans but retains administrative (and evaluative) control. After three years, with periodic formal evaluation (made available to the public), the D.C. schools expect to decide upon one of the competitive programs.

Here are the steps in competitive partnership, as outlined by the Associate Superintendent of Instructional Service in the District of Columbia Public Schools:

- assessment of student performance-scores on standardized tests, teacher evaluations, evidence of ability to handle materials appropriate to his age or grade level.
- establishment of clearly defined objectives stated in behavioral terms-"the overall thrust. . .is to guarantee that our children perform on grade level as measured by standardized tests in reading and mathematics."
- selection of materials correlated to the objectives-on the basis of published materials, D.C. schools selected publishers to be asked to write proposals outlining . materials . staff development plans . community involvement activities . overall project management.
- implementation of competitive parnership-the school system gears to go along with each publisher's requirements; the publisher institutes staff development procedures,etc.
- evaluation of results-national publication of details of instruction and pre- and posttest results.

The D.C. Schools expect not only to adopt the most successful reading program -- as shown by the school's evaluation -- after three years, but also to produce "a great deal of information that will prove useful for school administrators, teachers, students, parents, and the community as a whole."*

*Guines, James T. Competitive Partnership: The Next Decade in Urban Education, Health Professional Services Monograph 4 (New York: D.C. Health and Company, 1972)

A Pragmatic Note on Program Selection, or, Will it Work in Your District?

Charles L. Jenks

A lack of agreement on what the central function of the school should be, as well as a rapidly expanding and somewhat bewildering, array of products in the educational marketplace, have created a conflict situation for school decision-makers. Conflict situation require choices. A set of procedures for handling one type of conflict -- competing instructional programs -- is proposed for consideration.

The procedures focus on how information about the characteristics of an innovation can be organized so that it can be analyzed in terms of the innovation's potential for the school district. If an innovation has been judged successful, then two kinds of general criteria have likely been satisfied. First, the implementtion process has resulted in the various elements of the program being in place -- e.g., curriculum materials or other learning resources being used as planning, program staff and students performing their expected roles. Second, and most important, the intended learner outcomes are being achieved. Third, measurement of program effects is essential at some level before the innovation can be ultimately judged successful.

To help ensure successful adoption of new programs and therefore avoid waste of resources, frustration, and sometimes ill-feelings that accompany failure of innovations, district staff should examine the innovation's characteristics in terms of their appropriateness to the district's characteristics.

Adoption of any substantial innovation requires a planned change process. A useful way of illustrating the process of effective

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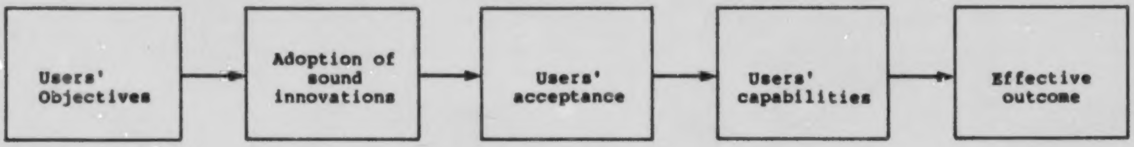
change was proposed by Fullan (1972), as shown in Figure 1. If we apply Fullan's paradigm to examining an innovation for possible adoption, three very general issues emerge.

Figure 1: Elements of Effective Educational Change Processes at the User Level



Fullan's first element concerns the purpose or goals of the innovation and the extent to which they are consistent with those of the adopting school or district, as well as the appropriateness of the innovation for the student groups who will use it.

The second element, adoption of sound innovation, must really be framed in terms of the next two elements. In other words, soundness of the adoption, aside from such factors as the philosophical or technological excellence of the innovation itself, depends on its acceptance by its users (staff, students, and perhaps parents) and the capabilities of users to perform in ways expected of them.

If users are accepting of the innovation and possess or can attain the required performance capabilities and behavioral patterns, then the implementation process can be successful. Whether or not the adoption process can be successful in terms of learner achievement of expected outcomes cannot, of course, be known at this point. Therefore, adoption decisions should be made primarily on the basis of (1) the appropriateness of the innovation in terms of goals, objectives, or an identified problem for a particular group of students, (2) the acceptance of the innovation by intended users, and (3) the capabilities of the users to perform or learn behaviors required by their changed roles.

The procedures described below emerged from two prior studies at the Far West Laboratory. Sikorski and Hutchins (1974) studied the feasibility of targeting research and development products at appropriate audiences. Jenks (1975) studied the adoption and implementation feasibility of the FWL model of Experience-Based Career Education.

In general, the procedure calls for organizing information about the innovation under consideration and using the information to consider adoption. First, describe briefly the content coverage, intended audience, and major purposes or outcomes of the innovation's use. For example:

"The Current Issues Social Studies Program was designed primarily for grades 11 and 12 and focuses on student generated problems and concerns as the curriculum content. Intended student outcomes include the development of inquiry and problem-solving skills, formulation of student values, and knowledge of how most problems and issues require studying across disciplines.
Appropriate: _____Yes _____No"

With this description one should be able to determine whether or not the innovation (1) responds to an identified need, (2) fits the student group identified as having the needs, and (3) has acceptable intended outcomes. If the innovation misses on any of the three, it may be rejected outright. If, however, the innovation fits, consideration proceeds to the next two issues.

For this, judgments about various aspects of the innovation are obtained using a set of generic categories (e.g., teacher role, student role, content organization). First, brief description are prepared for each category that corresponds to the innovation's stance on the matter. Second, referent group(s) are determined. Information may be desired that is concerned only with the teacher group, or judgements concerning student and parent group reactions may also be necessary. Third, one or more items should be written concerning each category for each selected referent group, followed by a set of four multiple-choice responses ranging from very strong support to very weak support. Where applicable, items should be prepared that refer to both user acceptance of the innovation and user capabilities to operate the innovation. An example that assesses staff capbility follows:

"Category: Teaching/learning method
Innovation's Stance: The ABCE Science Kit requires the teaching staff to be competent in a variety of methods and techniques, including demonstration, discussion/seminar, discovery/inquiry, and individualized techniques.
1. Do science teachers presently possess the neccessary skills for these techniques?
(0) _____ Virtually all do.
(1) _____ A few do not, but they could be trained.
(2) _____ It would be a serious problem for many.
(3) _____ Most do not and massive retraining would be involved."

The response selected enables one to judge whether or not a discrepancy exists between the innovation's characteristics and, in this case, the school's current capability. Discrepancies occur because the nature of the product is incompatable with the nature of the user or because the circumstances for using the innovation are incompatible with the resources of the user. Estimates are made by assigning a value of 0, 1, 2, or 3, interpreted as follows:

0 -- No discrepany, either because the characteristic is irrelevant or because it is perfectly acceptable.

1 -- A discrepancy exists, but it is not serious enough to prevent a successful implementation.

2 -- A discrepancy exists, and it is likely to prevent successful implementation.

3 -- A major discrepancy exists, and the innovation will not work as long as this discrepancy does exist.

The remainder of this paper consists of an example of the process using the fictitious social studies program described. Although the ratings were arbitrarily made by the author for a hypothetical staff, the example shows how the judgements may be used to provide data for decision-making.

CURRENT ISSUES SOCIAL STUDIES PROGRAM

A. Content Scope. The program is based on an interdisciplinary approach in geography, history economics, etc.

1. Would the involved teachers support an interdisciplinary approach to social studies?[1]
_____ Virtually the entire staff would be supportive.
_____ One-half or more would be supportive.
__X__ Only a few staff members would presently by supportive.
_____ Virtually no support exists.

B. Content Organization. The program does not have a predetermined sequence of learning steps. Rather, students select topics for study and, together with the teacher, plan projects.

1. What is the attitude of the staff toward programs of instructions in which the content of learning is not presequenced?
_____ This would be acceptable to everyone.
__X__ Some would object, but this probably would not prevent adoption.
_____ There would be fairly serious problems with many teachers.
_____ Such programs would definitely not be adopted.

C. Teacher Role. With this program, teachers function as coordinators and facilitators. Their role therefore includes group work, planning with and advising individual students, and frequent encounters with community people.

1. Would there be any resistance among involved staff to work in this way?
_____ No.
__X__ Yes, some resistance.
_____ Many would resist.
_____ No one would be agreeable.

2. Is there a sufficient number of staff members who have experience and are capable of performing this kind of role?
_____ Yes, most teachers are able to do so.
__X__ Very likely, but some minimal training may be needed.
_____ Doubtful; an intensive in-service program would be required for some.
_____ No; massive retraining would be necessary.

D. Student Role. The student is the primary planner and performer. The student is expected to select topics of interest and design a project indicating learning activities, desired resources, and evidence of project completion.

1. Would staff be willing to permit students to assume this kind of role in the classroom?
__X__ Yes, most staff would like to give students a stronger voice in instructional decision-making.
_____ Many staff would be willing.
_____ Most would resist.
_____ No one would permit such a thing.

2. Would parents be supportive of such a student role?
_____ Yes, most parents would be agreeable.
__X__ Yes, some parents would be agreeable.
_____ There would be serious problems with most parents.
_____ No.

3. Could students work in this manner?
_____ Practically all students could.
_____ Many students could.
__X__ Perhaps a few students in upper grades could.
_____ Most students would not function very well.

E. Teaching/Learning Method. A variety of methods are used, including discussion/seminars, discovery/seminars, discovery/inquiry, research/synthesis.

1. Do involved staff have the motivation to work in this way?
_____ Definitely.
_____ There are a few who could be identified.
_____ Not sure, most have fairly stylized classroom techniques of presentation, discussion, and application.
_____ Definitely not.

2. Do involved staff have such capabilities?
_____ Absolutely.
_____ There are sufficient numbers of capable staff to make it work.
__X__ Quite a bit of in-service training would be needed.
_____ No; teachers who would be involved have not worked this way.

F. Student Grouping. The program is non-graded in terms of content and is also multi-graded in terms of student grade classification. Small groups, when they are formed, are usually heterogeneous and interest-based. Thus a teacher has responsibility for a group composed of both 11th and 12th graders?
_____ There is heavy involvement with such grouping and it would present no problem.
__X__ There is some of this and could probably be more.
_____ Organization for this on a small scale might be possible given enough lead time.
_____ Not at present.

G. Materials. A teacher manual is available that provides general guidelines for teachers, sample projects, and suggested learning topics. Teachers and students are expected to locate learning resources (books, articles, people) for use with projects.

1. Would there be any objection to adopting an instructional program that provides only a framework , guidelines, examples, and suggested procedures and leaves content selection, sequence, and design of learning activities to the student and teacher.
_____ Not at all.
__X__ Maybe some.
_____ Quite a few would object.
_____ There would be overwhelming objections.

2. Does the staff have the capabilities to work with students in selecting and sequencing content and identifying useful learning resources?
_____ Yes.
_____ For the most part.
__X__ Not very many do.
_____ No.

H. Physical Setting. In addition to some time in a classroom, students are expected to spend up to 30% of their time on their own with learning resources outside the classroom, including work with community people, in libraries, museums, courts, etc.

1. Would this new student freedom be acceptable to the staff?
_____ Yes.
_____ It would bother a few, but not seriously.
__X__ It would present real problems for several.
_____ No.

I. Student Evaluation. Evaluation is criterion-referenced and often subjective. Since projects vary widely, evaluation is individualized and includes the student in assessing progress. Standardized tests are not recommended.

1. Would this type of evaluation be acceptable to staff?
_____ Yes.
__X__ Most would be willing to try this approach.
_____ Most would object and would be concerned about objectivity.
_____ Reliance is on standardized tests and teacher-made tests for the assessment of student work.

J. Staff Reorganization. The program recommends that social studies teachers form planning teams and work together as much as possible.

1. Would the involved staff be willing to work together as a team?
_____ Yes.
_____ Most would.
__X__ There would probably be a rebellion.

2. Do staff members have the necessary skills (leadership, interaction, etc.) to work in teaching teams?
_____ Yes, staff are experienced with this.
__X__ Some teachers could, if carefully selected.
_____ Most could not without some kind of training.
_____ Massive retraining would be required.

DISCUSSION

A rapid assignment of 0, 1, 2, or 3 weights to the responses to the program gives an appropriate mean score of 1.4. This discrepany exists, but it is not serious enough to prevent a successful implementation, and (2) a discrepancy exists, and it is likely to prevent successful implementation.

How would one interpret this judgement? It suggests that although the innovation could be successfully implemented, there are risks involved. But it is unwise to drop the matter there; a number of tentative recommendations might be made. For example:

1. If the decision to adopt is made, the judged acceptance of various innovation characteristics suggests that a start on a small scale (a pilot project) with a volunteer staff would be wise.

2. Even though an expensive procedure, a pre-service training workshop that focuses on required teacher skills and procedures should be given strong consideration.

3. Because the success of the program depends on the availability and identification of a variety of learning resources for student use, adequate lead time for staff to plan and organize seems essential.

If teachers were the only group to consider, these recommendations would likely be sufficient. But such is probably not the case. Since the program appears substantially different from more traditional means of education, parent and student reactions are important and, therefore, more items for these groups should be added to the decision-making.

If the total discrepancy score obtained is 0 or very close to 1, the innovation is seen as a low risk opportunity. A score of between 2 and 3 suggests a very high risk situation and that considerable change in staff attitudes and increased capabilities is necessary before successful implementation can occur.

The proposed procedure provides data for deciding whether or not an innovation can be implemented well and where effort should be expected to help ensure trouble-free implementation. Respondents to the items may be the decision-makers or representatives of various constituent groups. The approach used by the Far West Laboratory was very helpful to educational developers and could also prove useful to school decision-makers.

Note:

It is possible and usually desirable to write more than one item per referent group as well as to use more than one referent group per category.

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Selecting a Local Education Improvement Program - an excerpt

Beverly Loy Taylor

Objective 8. Select an improvement program, based on alternative resources and local positive and negative factors.

So far in this unit, you have studied how to outline steps in selecting an educational program, identify the area of concern, specify aims, assess shortcomings and their causes, identify alternative resources to remedy the situation, and assess local factors favoring or opposing adoption of the resources. All of this study has had but one purpose -- to facilitate the selection of the improvement program(s) to be introduced.

Objective 8 considers these final topics:

1. Utilizing skills needed in selecting a solution,
2. Clarifying the information obtained that leads toward a solution,
3. Recognizing available options, and
4. Recommending which program(s) to choose.

Let us look at these topics briefly.

1. Utilizing needed skills. There are two types of skills important to the task of helping to select the program(s) for adoption. They are skills in evaluating and integrating the data received from the preceding steps leading up to the selection, and, skills in

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working with key school and community people in making the actual choice. Situations involving people are never static; often, it is possible to build positive attitudes or to increase support during the planning phase. Modifying negative factors in the local situation can mean the difference between success and failure of a program suitable for adoption.

2. Clarifying the data obtained. By this is meant organizing and expressing the information in a clear, concise way so that it can be read and interpreted quickly. Clear data will provide a strong basis upon which to make the final decision. In the event that more information is needed, this is the point at which such a determination is made and a plan for obtaining the missing information can be shaped. Good reporting is an aid to building support for a favored program that is meeting resistance.

   Presenting key program features in a concise, open-ended manner encourages questions and discussion among board members, school administrators, teachers, or community people, and fosters positive attitudes among participants.

3. Recognizing available options in the selection. There are several actions to be considered in selecting the program(s) to be adopted. The most obvious one, of course, is selecting a program for system-wide adoption. Such a course usually indicates that a school district has sufficient funds and personnel to mount the program and also has complete confidence in the program to meet the needs of its students. A second possibility would be to pilot test the program in one school in order to keep costs down and to view results of the program before diffusing it throughout the system. This approach is a more common one since it is often difficult to relate a program's values to the local district needs without having firsthand evidence on its strengths and weaknesses.

   A variation of this approach is to pilot test more than one program and compare the results. A school district might opt to take this course when two programs are viewed as equal in terms of their potential for remedying causes of the shortcomings. Two or more schools might be chosen as pilot test sites for the programs being considered; the basis of choice should be the schools' ability to provide a setting and target audience that are generalizable to other schools in the district and in their staff and community's favorable attitudes toward trying the program.

Another option that a school district could elect to do is to adapt features from two or more programs to the local situation -- a "mix and match" approach to try to achieve a tailor-made solution to the problem. Naturally, it is important to introduce program components in all areas needing improvement; otherwise, it would be difficult to assess the results when only part of the problem had been addressed.

4. Recommending which program(s) to implement. This final task occurs when all of the information is collected and when it has been decided how best to introduce the program(s) whether in terms of system-wide adoption, pilot testing, or adoption of features from different programs. The recommendation should be accompanied by the supportive data that led to the decision so that the person who reviews the recommendation has the benefit of information used in reaching the decision.

Now read the prelude to Exercise 8 which is the last one in the unit. It will help you to organize and present information for use in selecting a program.

Exercise 8

First, review the description of the elementary science program presented in Objective 7. This illustration will serve as background material for you to complete this exercise.

Assume that you are the Director of Elementary School Program in the district and that you must recommend to the Superintendent which program(s) should be selected and how it should be implemented in the district. Suppose that you have spent time in gathering information about the programs and viewpoints of district personnel and community members and that you find a situation where the answers are not so clearcut. Although the cost restrictions still are present, people seem to be divided on the issue of which program(s) will be most suitable to the needs of elementary schools in the district. Strong cases have been presented that favor each of the four alternative programs being considered (two science curricula and two organizational approaches). You have a time constraint (it is April) and there is not enough time to acquire more information or to locate more alternative resources for examination. A decision must be made quickly so that program materials can be ordered and plans developed and put into action for September implementation.

Which programs would you recommend to the Superintendent? Would you suggest system-wide adoption of them? Write your recommendations in the space provided and then, by selecting information from the illustration, indicate which data led you to your conclusions.

Upon completion of the exercise, check your work with the Answer Key.

EXERCISE 8 - WORKSHEET

Recommending an Improvement Program for Adoption

Directions: Remember that there are two types of programs being considered: Curricula (Programs A and B) and Organization for Instruction (Programs X and Y). Indicate which of them you would recommend for adoption and how you would put them into operation in the school district. Then list the information gathered from the illustration that led you to your decision.

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1. Program(s) recommended for adoption (circle choice(s) below):

   Curricula -- A B Organization for Instruction -- X Y

2. Would you recommend system-wide adoption? If not, what would you recommend? Why?

3. What information in the illustration led you to your conclusions?

EXERCISE 8 - ANSWER KEY

Recommending an Improvement Program for Adoption

There are, of course, several courses of action that might be recommended. There is one obvious fact: Two causes for shortcomings exist (uninteresting curriculum and lack of teacher competencies in elementary science instruction); and if the science program is to be improved significantly, both of these causes must be remedied.

1. Program(s) recommended for adoption:

   Curricula -- A and B   Organization for Instruction -- Y only

2. System-wide adoption is not recommended. Pilot testing should be carried out by combining Curricula A with Organization Y in one or more schools and Curricula B with Organization Y at other sites. The reason for trying both curricula is based on the split between local personnel favoring one or the other. Oranization Y is more clearly the better choice. Pilot testing permits a tryout of the more expensive Curriculum B in a small setting so that commitment of funds is not great. The results of the pilot testing will form the basis for the district's decision on which program to implement on a system-wide level.

3. Information leading to these conclusions includes the following:

   Both curricula had strong proponents in the district.

   Although Curriculum B was costlier in terms of initial expense and implementation difficulties, it could prove to be superior to A in pilot testing; in this case, the district might choose it for system-wide adoption if these factors became less important with the passage of time. Pilot testing provided a small, inexpensive method of trying it.

   Since both curricula were favored, it would be unfair to impose one of them on all students and teachers.

   Because Organization Y offered flexibility and opportunity for teacher judgments, it was felt to be the beter of the two programs.

Local personnel would have a choice of programs and this fact would enhance possibilities of successful implementation since enthusiasm would be a strong factor in getting them off the ground.

If none of the choices proved to be suited to the district at the pilot stage, little in the way of funds, time, and energy would have been lost.

Censorship: The Challenge to Freedom in Schools

A Joint Publication

INTRODUCTION

The selection and adoption of educational materials is one of the school's most important and controversial tasks. The potential for complaints and challenges concerning the materials is a very real threat to the professional educators' efforts to provide the best learning tools and atmosphere for their students.

Escalating protests of individual books, learning series, and other materials means that your school's policies and programs should be examined and reexamined regularly.

This report brings together the experience of several superintendents, principals, librarians, teachers, curriculum workers, educational association staffers, and others who have been personally involved in recent protest and challenge situations. Their opinions and suggestions are offered to help you focus attention on your own circumstances, before a problem develops. We also present sample selection policies, complaint procedures, and guidelines to implement active community involvement programs.

One Virginia educator summed it up rather well when he said, "Perhaps, if we had been really on top of it, we could have had some strong citizen support at the first board meeting when the challenge was scheduled, but that would have required a lot

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of foresight. The original attack was like a bolt from the blue."

The threat of censorship is a real one. As one New England curriculum worker said, "It doesn't just happen in coal mining communities in the Southern mountains. It happens in sophisticated, suburban communities like the one I work in."

A Midwestern librarian, who was the victim of a particularly brutal episode, explained the problem of being unprepared. "I was at a regular board meeting when one member brought up a complaint about a book and they went into executive session to hear portions of it read. Our school board didn't know there was a selection policy until after it happened."

And the personal nature of a challenge came from a Midwestern superintendent. "They may not use dynamite as they have in West Virginia, but there will be harassing phone calls in the middle of the night and obscene letters sent to your family, which are very upsetting."

The potential problem of complaints and protests exists everywhere. In large and small schools, urban and rural districts, in all grades, and in all economic and geographical areas, the pressure is on intellectual freedom. If it isn't at your school, it might be soon.

SAMPLE POLICIES

The key to avoiding major disputes is the establishment and use of a formal, definitive, written procedure for the evaluation and selection of materials. The following sample, produced by the National Council of Teachers of English in cooperation with the American Library Association, is used by many districts. The statement directs itself to the library in several sections, but it is equally applicable to the English or Social Studies program with minor modifications. There are several points of emphasis: comprehensive objectives; direct board responsibility; strong curriculum-based criteria; high level professional review procedures; an advisory committee appointed by the board or superintendent that includes students and parents; and a specific outline of policy and action on challenged materials.

Policies and Procedures for Selection of Instructional Materials

The following statement of policy making with regard to instructional materials selection for the school library media center is offered as a guide for the formulation of a policy. It is believed that such a policy should be formally adopted by each school district as a basis for consistent excellence in choice of materials and as a document that can be presented to parents and other citizens for their further understanding of the purposes and standards of selection of these materials.

Patterns of Policy Making

The governing body of a school is legally responsible for all matters relating to the operation of that school. It is recommended that assumption of responsibility and the delegation of the authority for the selection of instructional materials should be adopted by the legally responsible body and then stated in a formal policy to the professionally trained personnel employed by the school.

Selection of Personnel

The responsibility for coordination of the selection of instructional materials for the school's library media center should rest with the professionally trained media personnel. Administration, faculty, students, and parents should be involved in the selection process. Final decision on purchases should rest with the professional personnel in accordance with formally adopted policy.

Types of Materials Covered

Criteria for evaluation and selection of all types of instructional materials should be established. Such criteria should be available in written form.

Criteria of Selection

The primary objective of a school library is to implement, enrich, and support the educational program of the school. Criteria for instructional materials should implement this basic objective.

Criteria for the selection of all instructional materials are both general, as found in the professional literature, and specific in terms of the needs of each school community.

General criteria are stated in terms of significant descriptors of the subject; integrity of treatment; and quality of the medium-style, clarity, originality, etc. Specific criteria are determined by a study of the characteristics of the school's instructional program and the needs of the students as affected by the community as follows:

- Needs of the individual school program based on knowledge of the curriculum and on requests from administrators and teachers
- Needs of the individual student based on knowledge of children and youth and requests by parents and students.

Needs from these several sources will require a whole range of instructional materials for an acceptance level of quality, on all levels of difficulty, and with a diversity of appeal; and the presentation of different points of view -- ethnic, religious, political, and cultural.

Selection Tools

Reputable, unbiased, professionally prepared selection aids should be consulted as guides.

Challenged Materials

A procedure should be established for consideration of an action on criticism of materials by individuals or groups. An example of such a procedure follows later.

Bill of Rights for School Library Media Programs

Media personnel are concerned with generating understanding of American freedoms through the development of informed and responsible citizens. To this end the American Association of School Librarians asserts that the responsibility of the school library media center is:

- To provide a comprehensive collection of instructional materials selected in compliance with basic, written selection principles, and to provide maximum accessibility to these materials.
- To provide materials that will support the curriculum, taking into consideration the individuals' needs, and the varied interests, abilities, socioeconomic backgrounds, and maturity levels of the student served.
- To provide materials for teachers and students that will encourage growth in knowledge, and that will develop literary, cultural and aesthetic appreciation and ethical standards.

- To provide materials which reflect the ideas and beliefs of religious, social, political, historical, and ethnic groups and their contribution to the American and world heritage and culture, thereby enabling students to develop an intellectual integrity in forming judgments.
- To provide a written statement, approved by the local boards of education, of the procedures for meeting the challenge of censorship of materials in school library media centers.
- To provide qualified professional personnel to serve teachers and students.

Policies for Selection of Instructional Materials

Objectives of Selection

The primary objective of the school's educational media center is to implement, enrich and support the educational program of the school. It is the duty of the center to provide a wide range of materials on all levels of difficulty, with diversity of appeal, and the presentation of different points of view.

To this end, the Board of Education of _______ reaffirms the objectives of the Standards for School Media Programs and asserts that the responsibility of the school media center library is:

- To provide materials that will enrich and support the curriculum, taking into consideration the varied interests, abilities, and maturity levels of the students served.
- To provide materials that will stimulate growth in factual knowledge, literary appreciation, aesthetic values, and ethical standards.
- To provide a background of information which will enable students to make intelligent judgments in their daily life.
- To provide materials on opposing sides of controversial issues so that young citizens may develop under guidance the practice of critical analysis of all media.
- To provide materials representative of the many religious, ethnic, and cultural groups and their contribution to our American heritage.

- To place principle above personal opinion and reason above prejudice in selection of materials of the highest quality in order to assure a comprehensive collection appropriate for the users of the library media center.

Responsibility for Selection of Materials

The _______ Board of Education is legally responsible for all matters relating to the operation of ______ schools.

The responsibility for the selection of instructional materials is delegated to the professionally trained personnel employed by the school system.

Selection of materials involves many people: principals, teachers, supervisors, and media specialists. The responsibility for coordinating the selection of instructional materials and making the recommendations for purchase rests with the professionally trained media personnel.

Criteria for Selection of Instructional Materials

Needs of the individual school based on knowledge of the curriculum and of the existing collection are given first consideration.

Materials for purchase are considered on the basis of:

overall purpose, timeliness or permanence, importance of the subject matter, quality of the wiring/production, readability and popular appeal, authoritativeness, reputation of the publisher/producer, reputation and significance of the author/artist/composer/producer, etc., and format and price.

Requests from faculty and students are also given consideration.

Procedures for Selection

In selecting materials for purchase the media specialist evaluates the existing collection and consults reputable, unbiased, professionally prepared selection aids; specialists from all departments and/or all grade levels; the media committee appointed by the principal to serve in an advisory capacity in the selection of materials.

In specific areas the media specialist follows these procedures: Gift materials are judged by the basic selection standards and are accepted or rejected by those standards; multiple items of outstanding and much in demand media are purchased as needed; worn or missing standard items are replaced periodically; out-of- date or no longer useful materials are withdrawn from the collection; sets of materials and materials acquired by subscription are examined carefully, and are purchased only to fill a definite need; salesmen must have permission from the superintendent's office before going into any of the schools.

Challenged Materials

Occasional objections to a selectin will be made by the public, despite the care taken to select valuable materials for student and teacher use and the qualifications of persons who select the materials.

The principles of the freedom to read and of the professional responsibility of the staff must be defended, rather than the materials.

A file is kept on materials which are likely to be questioned or considered controversial.

If a complaint is made, the procedures are as follows:

1. Be courteous, but make no commitments.

2. Invite the complainant to file his or her objections in writing and offer to send him or her a prepared questionnaire, so that he or she may submit a formal complaint to the media committee.

3. Determine whether materials may be sufficiently in question to immediately withdraw the material pending a decision of the media committee.

4. Inform the superintendent and the media supervisor.

5. The media committee will: read and examine the materials referred to it; check general acceptance of the materials by reading reviews; weigh values and faults against each other and form opinions based on the material as a whole and not on passages pulled out of context; meet to discuss the material and to prepare a report on it; file a copy of the report in the school and administrative offices.

The selection and evaluation of textual materials requires many of the same considerations as the library media center materials with some additions. Many of the additional requirements focus on the actual competition between publishers and the procedures for handling those details. There is also a basic difference in evaluation which is exemplified by the following excerpt from a Midwestern policy statement:

> The subject materials to be evaluated shall be determined upon the following basis. Principals and teachers shall make recommendations by November 10 of each school year in which they indicate the subject areas which need study. These suggestions shall be considered in the light of such factors as: objectives of the course of study, content, year of original adoption, copyright date and availability, physical condition of books now in use. The superintendent shall make final recommendation for study of textual materials to the board of education for their consideration.

Several of the leaders interviewed mentioned the same point in dealing with a complaint or a question about a selected book. One suburban superintendent said it very well. "The key to dealing with controversial issues is being able to stay calm and cool, knowing that there is an excellent supporting staff of professionals with whom to work. We have urged our staff to never overreact. Also, we have tried to always let the public know that we are providing materials on opposing sides of almost every controversial issue. It sometimes takes people aback when they know that we are willing to help them present their side of an issue, even though we think it is wrong."

Being able to handle things in a calm and cool manner first requires having a form for translating a verbal complaint into a formal written protest. The following sample also was prepared by the NCTE and the ALA and many systems have adopted it, or modified it slightly for their own needs. It serves for complaints about social studies texts as well as those about library materials and books assigned for English classes.

The professional committee established to review the complaints should be broadly representative of theselection committee. One West Coast district has written the following regulation to form the committee.

> Special Review Committee
>
> The committee shall consist of the district superintendent, ex officio; the assistant superintendent in whose division

the material or practice exists, who will serve as chairman.

If the practice or material is instructional in nature and exists at the high school level, the coordinator from each high school in the district who works in the area in which the material or practice is used, an administrator from high school level, the secondary and elementary directors of curriculum planning, and a representative of the PTA, chosen by that organization.

If the practice or material is instructional in nature and exists at the elementary level, two teachers from the appropriate grade level, an elementary principal, the director of curriculum planning for elementary schools, and a representative of the PTA, chosen by that body.

There shall be a provision for a majority and a minority report. Following the recommendation of the committee to the superintendent, he or she will submit the committee report along with recommendations to the board of education for consideration and action.

One policy that several educators thought was a good one was that of having a citizen's advisory committee. One Plains state district outlined its advisory panel as follows:

The Citizens' Advisory Textbook Committee

The purpose of the committee is to study the textbooks recommended by the local selecting committee for use in the schools and to make recommendations to the coordinator of instruction relating to the textbooks to the end that there shall be in use in the school district the highest quality textbook available.

The school board concept of highest quality textbooks is:

1. Textbooks that in the opinion of the local selecting committee present the subject matter in the most effective manner consistent with our philosophy of education.

2. Textbooks that, whenever possible, promote pride, confidence, and trust in the democratic principles upon which our country is founded.

3. Textbooks that refrain from partisan presentation of controversial issues.

4. Textbooks that are neither racist nor sexist in nature.
5. Textbooks that, whenever possible, are interesting, well illustrated, current, and appropriate.

This committee is advisory in nature and is appointed to study textbooks and make recommendations with particular emphasis on subject headings 2-5 of the school board concepts of highest quality textbooks.

The committee will be composed of three to six members appointed by the board to serve for a period of one adoption. The committee will meet on the call of the coordinator of instruction and remain active until recommendations are submitted to the superintendent of schools. Committee recommendations are to be made to the coordinator of instruction in writing. Special joint meetings with the local selecting committee may be called by the coordinator of instruction.

HANDLING A COMPLAINT

There were many suggestions for the long range prevention of major controversies, falling into five main areas.

1. Establish a broad range of professionals in the school to select the materials, preventing any one individual's oversight.
2. Present real and logical alternatives when a course is obviously controversial, offering the student and the parents an early opportunity to select.
3. Provide strong administrative regulations to deal with complaints, ensuring immediate action for the complaint or appeal.
4. Move the controversy to the school board level as soon as it appears that the building level staff will not be able to solve the problem, avoiding any teacher-parent-principal conflict.
5. Defend the professional practice of your school system, not any individual material in question.

First, nearly everyone suggested avoiding a controversy before it starts. A superintendent in Ohio advised, "Involve a very broad spectrum of people in your input on book selection. In our two high schools we have all the English department people and the librarians from both schools work on what is going into a course. This procedure prevents one individual teacher or administrator from putting in objectionable material on his own."

A former principal and veteran of a recent complaint situation suggested an additional approach. "You have to have parents in the selection process and I think it is good to have student representatives in at the high school level. However, we have both on our selection committee and we still have a large problem. It isn't the total answer, but at least it gives some legitimacy to the whole thing if you say you did have the community represented. It's certainly better than not being able to make a reference to that sort of thing."

"An awful lot of things can be done in a community where there has been a continuous communication between a good professional staff and most of the people," explained a Midwestern superintendent. "We encourage the community to use our facilities. The libraries are open at night and we have the community college sharing our buildings. If we hadn't had that kind of positive relationship we would have been dead. You get most of the community on your side to start with and then try not to get too upset when there are complaints from a small group."

A principal felt differently, though. "We don't ask people to come in and help us censor books. We think the job of selection of books and other materials belongs to the professional staff and don't ask parents to assist them."

A curriculum supervisor said, "It certainly can help to disarm critics if they are on study committees, particularly in subject areas where people have some worries or ones which might be controversial or that you feel need a wide base of support to be successful." He described a drug education program which included parents, doctors, law enforcement officials, politicians, and the school professionals in drafing the curriculum. It turned out so watered down and bland that the students laughed at it. He felt it would have been better to have no course at all than the sanitized one.
Second, several educators suggested a plan used in handling sex education courses several years ago be used to deal with any topic which might cause strong community reaction. This is to allow the parents to take their children out of certain courses with a note of explanation.

A superintendent who handled several challenges a few years ago outlined his program. "If an area or course or even a book is known to be controversial we provide information regarding that to the parents ahead of time so they can opt to put their child in that course or not. We offer an alternative, a logical and academically viable alternative. The best person to have on your side is the student. We have them involved in the selection of courses and teachers and that often helps the student disarm parents who might want to complain or criticize."

Third, everyone interviewed stressed that the school board must prepare a policy statement and issue a definite pattern to use in handling controversial material, coupled with strong administrative regulations to implement those policies. There are samples of these earlier in this report. The central point was that with an established procedure you are armed for the first complaint and don't lose the first battle because of surprise.

An educator from the West Coast put it simply, "We have a procedure for any parent who objects to any book of any kind. They can file a complaint. We have a form which every principal and every librarian has in their office. If the parent voices any complaint or objection to anything we just say, 'Now you file a written complaint and we will get to work on it.' We want the complaint in writing, so they give us the form. Then we present the complaint to a committee, still a committee of professionals, who review the complaint and recommend to the superintendent whether to keep it (the book) or not."

A Midwestern librarian defined the focus of policy and regulations. "You have to have a definite statement from the board on how to handle controversial literature, on how books are to be selected, and how to handle complaints. Then you have to design the administrative regulations to make those policies work."

Another Midwesterner described the major danger in dealing with board policy. "The important thing about a school board's policy is that once they have made it, they stick to it. Our board has vacillated and allowed teachers to be attacked personally in board meetings. A Board which doesn't enforce its policies is worse than no board at all."

The procedures for review of materials had one feature which all agreed on, taking the materials off the shelf or out of the classroom while the review is in progress. "We take the book off the shelf until they have looked at it. The complainant gets action right away, there isn't any delay at all. Most of the materials go right back on the shelf, but others have stayed off. I think we have been very fair. The review committee has usually been the learning center director, the assistant superintendent for program, and the supervisors and teachers in a related area. A high quality professional group," outlined a superintendent.

One Southern source suggested a "time delay" be built into the board's policy statement to allow for a cooling-off period between the presentation of a complaint and the final decision on the matter. Another suggested that the parent have an immediate recourse at the building level, from the teacher to the principal. He felt that a great many complaints could be taken care of with a quick personal conference, while a more formal procedure might inflate the problem.

Fourth, once there is a formal complaint most superintendents and principals felt it should be moved out of the building and on to the school board as soon as possible. One said, "You have to make sure that the complaining parents understand that they have options for their child, but so does every other parent in the district. The complainant must be shown that they can't expect to take away any options from other parents and children. If we can't teach a certain book, then it is removing certain options from the other parents. We emphasize the democratic aspect of the situation. The people who say it isn't good for anybody have the option of not having it taught to their child, but the other parents have the option of having it taught to their children."

Fifth, the defense of the professional selection process and not the individual piece of instructional material which has been challenged was one important concept that almost all of the veterans mentioned. "We are defending the freedom to read and not the materials," said one superintendent. "Now that is what we believe and that is the first thing that I say to them, 'Look, I am not trying to defend that book, but the right to read it and the professional responsibility of my staff I'll defend right down the line.' "

Some suggested that contacts in the news and communications media, as well as general community leaders, could be very helpful if a situation expanded into more than a building or simple board problem. "We did a lot of work with the local TV stations and the newspapers. We tried to drum up as much support in the community as possible," said a Southern educator. Information on school board policy and administrative regulations can be explained to news personnel and then they have an understanding of the situation before it happens, and perhaps can add support.

Another educator who has just completed a compromise settlement said that he thinks these things should be kept as local as possible. "It seems as if this group was looking for nothing more than statewide and national attention. They were communicating with people in Kanawha County, West Virginia; with a John Birch group in New York State, at least they distributed publications of the John Birch Society. We didn't go out of our way to make a big fight of it, we wanted to stay small and calm."

A candid self-assessment of your school's program for selection and review of complaints might be the best way to defuse a situation before it starts. The policies presented earlier are models to explore.

One pitfall mentioned by those interviewed was the error of running away from a problem or acting defensively. They emphasized that the right to freedom in selecting materials by professionals must be strengthened, not weakened, at all times. "We found that here, since we have had five textbook controversies in a row, that trying to placate the extremists by putting in procedures to suit them is wrong. They just seem to get a taste for blood. Each time they moved it got worse. First it was a couple of books, then they said, 'After we get these two books out there are 20 more, and then 20 more after that.' It just doesn't pay to give in."

CONCLUSIONS

There are several motivations attributed to the complaintswhich most of those interviewed had dealt with, ranging from sincere beliefs to political opportunism.

"The people who were really upset about this were fundamentalist and quite sincere about the whole thing. They were concerned about what they saw as sacrilegious or in some way against God.

They were not very well educated people, but convinced of their own belief. They found it hard to understand why public schools shouldn't echo their own beliefs. They are very sincere and I don't know how you combat them. Perhaps by getting equally sincere people on the other side," said a veteran of a recent textbook challenge.

Another explained it in similar terms, "They see their children watching things on TV that are very different from the way they believe and they see their children reflecting some of the things which they hear in popular music. They feel that those areas are far out of their control, but that the taxes they pay for the schools are close at hand and they are going to get those textbooks out of the classroom.

"It is a group which sees society going away from it in its trends and that is quite upsetting. The protesting is one way of yelling out and saying, 'Stop it!'"

"Given time to work on these things they will settle down, they have here already."

On the other extreme there are examples of local political groups using the issue of books in the schools and libraries as objects in larger strategies, just as they use the issues of redistricting and busing.

One expert in the field made a slightly cynical, but accurate assessment of the problem of censorship. "I think that what you will find if you look into this in any depth is that when you are dealing with reasonable people the political process will work, regardless of what it is -- fairly elaborate or merely a modicum of participation by personnel in a review or selection committee. But the situations which are surfacing now are much the same as we had back with the sex education program. We are dealing with the extreme viewpoints and their position is one of no compromise and no negotiation and then no democratic process will work. No mechanism will prevent the kinds of problems you have in Kanawha County."

There was another aspect to the problem, that of educational quality. A Midwestern superintendent voiced it very well, "I think that this problem is a definite threat to the publishing area. If we allow this threat of complaints to cause 'nothing' books to be printed, we are in deep trouble."

So there are several dangers, all occurring at the same time and presenting both short and long term concerns for the schools. There is no time to wait and debate. You must plan and prepare for the challenges of censorship in the school well ahead of actual challenges.

Innovations Evaluation Guide: An Evaluation Tool for Innovation Consumers in Vocational/ Technical Education

The Center for Vocational & Technical Education

WHAT IT IS

The Innovations Evaluation Guide is an instrument to help improve the decision-making ability of educators who evaluate innovations. The Guide classifies innovations by their characteristics in a manner which facilitates their evaluation by potential adopters.

WHY IT WAS DEVELOPED

Educators often lack pertinent information upon which to base their decisions. Use of this Guide will reduce the risk of failure due to an oversight in considering essential information. This aid to making a more rational decision suggests evaluative criteria for assessing an innovation.

HOW IT WORKS

The format of the Guide allows the evaluator to do a step-by-step analysis of the benefits and costs of an innovation. By providing information for the applicable characteristics, the evaluator can gain support and approval from those who are affected by his decision. Developers and promoters of exemplary innovations can use the categories in the Guide to supply consumer information on their products.

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WHO CAN USE IT

The Guide can be used by any educator who has the task of evaluating innovations. Potential users include such people as classroom teachers, school administrators, state supervisors of exemplary programs, local educational agency project directors, state department personnel, teacher educators, research and development center personnel, and research coordinating unit personnel.

WHEN TO USE IT

Educators should find the Guide most helpful when an innovation needs to be considered for adoption. It can also be useful as an evaluation tool to assess an innovation which is in the trial stage of adoption.

WHAT IT IS NOT

This guide does not attempt to assess community or organization needs for innovations. The identification of problems and the mobilization of resources are the prerogatives of decision-makers in educational agencies.

Since the purpose of this Guide is to assess innovations rather than local situations, the educator must know his needs and be able to identify problems which exist. At this point, the Guide is useful in evaluating innovations as possible solutions to the perceived problems.

Information on the development of the Innovation Evaluation Guide can be obtained from the Final Report, The Classification and Evaluation of Innovations in Vocational and Technical Education, Research Series No. 71. This research was conducted at The Center for Vocational and Technical Education, The Ohio State University, by William L. Hull, principal investigator, and Randall L. Wells, research associate.

A limited number of single copies are available upon request from the Product Utilization Specialist at The Center.

(The Guide, in its original form, is set up as follows to enable educators to write comments about the innovation being evaluated. To conserve space, we have eliminated the boxes.)

Evaluate Individual Pupil Growth

Evaluate Program Operations

Evaluate Society and the Economy

BENEFITS

INDIVIDUAL PUPIL GROWTH

- Rate of Learning

  What effect will the innovation have on the rate of student learning?

- Scope of Learning

  How does the innovation affect the number and type of learning experiences and/or skills to which the student will be exposed?

- Attitude

  What effect on attitudes can be attributed to the innovation (i.e., community, students, teachers, administrators)? Are there any experiences which assist the students in the development of their self-concepts and their abilities to relate to other individuals?

PROGRAM OPERATIONS

- Efficiency

  What information is available which will allow a cost/benefit analysis of the innovation? How does this analysis compare to the present status or other alternatives?

- Effectiveness

  What evidence indicates the innovation can achieve the required objectives to our satisfaction?

SOCIETY AND THE ECONOMY

- Entry and Advancement in an Occupation

  What effect does the innovation have on increasing the opportunities to acquire job entry skills? Does the innovation include activities which will contribute to promotion and satisfaction on the job?

- Economic and Social Efficiencies

  What effect will the innovation have on productivity and costs to society in relation to such items as wages, occupational mobility, and school dropout rate?

- Social Values

  What attempts will be made to create an awareness of society in the students through the teaching of concepts concerning institutions, laws, cultures and social problems?

- Community Involvement

  What benefits will accrue to the school and community after installing the innovation? What effect will the innovation have on such items as school and community relations, and the public image of the school?

CREDIBILITY

- Validity

  What evidence indicates that the innovation can achieve its objectives?

- Reliability

  Where has the innovation been tested previously? How similar are these settings to our situation?

ASSURANCE CONTRACT

- Warranty

  To what extent does the developer and/or promoter warrant the soundness of the innovation? Who is responsible for assuring the services of the innovation?

  What types of consultation and services are provided by the sponsoring agency to warrant the product?

COSTS

FUNDING

- Costs

  What is the cost per unit over time? Will the innovation involve a saving?

- Sources of Dollars

  How can the innovation be funded? Must the cost be borne locally, or is assistance available wholly or in part from state, federal, or public sources such as foundations? What are the possibilities of reallocating present budget items to accommodate installation?

- Availability of Dollars

  What processes and/or procedures must be followed to acquire the necessary funding? Is the local educational agency in a position to expend its own money and be reimbursed later, or are funds from other sources available prior to expenditure?

- Proportion of Dollars Available from Different Sources

  In what proportion are funds available from other sources? Do matching funds have to be local funds?

- Limitations of Use of Other than Local Funds

  What limitations are placed on the use of other funds? Can funds be used for instruction only, equipment and instruction, or equipment, supplies and instruction? Can funds be used for items such as construction, food, transportation or consultants?

TIME CONSIDERATIONS

- **Installation Time**

  How much time does it take to get the innovation working?

- **Lead Time**

  What deadlines are placed on activities prior to the operating date? How much time is necessary to order and receive items such as texts and materials? How much time is necessary to order, receive, and install equipment? Will the innovation require teacher orientation or advanced teacher planning time?

- **Planning Time**

  How much time must be devoted to planning by a teacher, coordinator or administrator during each week?

- **Operation Time**

  What amount of time is required by the innovation in daily preparation, classroom activities, meetings, etc.?

- **Cyclical Considerations**

  What characteristics of the innovation dictate that it be installed at a particular time during the calendar or academic year?

INSTALLATION CONSIDERATIONS

- **Acceptance**

  What barriers can be anticipated from the community, school personnel, or students concerning the installation of the innovation?

- **Complexity**

  What is the extent of involvement necessary to install the innovation? How many staff members, students, schedules, classrooms, laboratories, or schools are involved?

Divisibility

What are the requirements concerning extent of installation? Can it be trial tested by the adopting unit before complete installation of the total product.

- Policy Changes

  What changes in policy on the state and local level are necessary in order for the innovation to be successful? (i.e., procedure for a field trip on local level; certification changes on state level)

- Degree of Development

  Is the innovation in an installable form or does it require more development? Are additional materials or training activities necessary?

- Feasibility

  What evidence is there to indicate that the innovation will work in our situation?

- Adaptability

  What adjustments can be made to meet local conditions without damaging the authenticity of the innovation?

ORGANIZATIONAL CHANGE

- Disruption of Routine

  What interruption of routine is required by the innovation due to rescheduling of classes, retraining of teachers, sharing of facilities, etc.?

- Effect on Staff Organization

  What effect will the innovation have on the present structure? Does it create a need for a separate division or department?

- Role Change for Individuals

  What changes in duties and/or responsibilities are necessary for successful operation of the innovation?

- New Relationships among Groups

  What new kinds of relationships among departments or

  grade levels will be necessary for successful operation of the innovation?

PERSONNEL NEEDS

- Quantity of Staff

  What additions to the staff are required? How many part-time or full-time people per unit are needed?

- Teaching or Other Experiences

  What staff experiences are necessary for successful operation of the innovation? Do leaders need to have a knowledge of the community?

- Personnel Development Required by the Innovation

  What requirements are necessary for the development of certain role attitudes, skills, and competencies not presently possessed by personnel? Is the present staff capable of, and willing to handle the personnel development necessary for the success of the innovation? Are consultants available?

SPACE REQUIREMENTS

- Space (Housing)

  Are present facilities sufficient? If not, what physical facilities are necessary to house the innovation?

- Space (Land Use)

  What acreage is necessary for installing the innovation?

- Arrangement of Space to Other Programs

  Does the success of the innovation require close proximity to ongoing programs or present facilities? On the other hand, is a separate location desirable?

- Acquisition of Needed Space

  What are the options to acquiring needed space for the innovation? (i.e., donation, purchase, lease, rent, build)

EQUIPMENT REQUIREMENTS

- Hardware

  What are the major items of equipment or their components necessary for the operation and success of the innovation?

- Software

  What supplies are necessary for the operation of the innovation?

WORK SHEET FOR MAJOR COST ITEMS

		PHASES					
		Planning		Installing		Continuing	
TYPES OF COSTS		Innovation	Alternative	Innovation	Alternative	Innovation	Alternative
PERSONNEL:	Administrative						
	Instructional						
	Clerical						
	Consultant						
	(Other)						
FACILITIES:	Building Space						
	Equipment						
	Supplies and Materials						
	(Other)						
OPERATING EXPENSES:	Travel						
	Printing and Communications						
	Repairs and Maintenance						
	Overhead						
	(Other)						
	Sub-Totals						

Total Cost

*Per Unit/Per Time

*Per Unit (i.e., cost per pupil, cost per school, or cost per state, etc.)
Per Time (i.e., per instructional hour, per year, etc.)

CHECK LIST

The Innovation will benefit:

____ Students
____ Teachers
____ Administrators
____ The School
____ The Community
____ The State
____ The Economy
____ Society
____ Program Operations
____ (Other) ____________

The Innovation is:

____ Acceptable
____ Feasible
____ Adaptable
____ Divisible
____ Valid
____ Reliable
____ Warranted
____ (Other) ____________

The installation requirements are:

____ Funding
____ Staffing
____ Housing
____ Equipping
____ Organizational Change
____ Policy Change
____ (Other)____________
____

THE OBJECTIVES FOR THIS INNOVATION ARE:

Social Fairness Considerations and Considerations in Selecting Instructional Products - an excerpt

Southwest Regional Laboratory

CHECKLIST

Considerations in Selecting Instructional Products

This checklist is designed to help you in the selection of effective instructional products. Use it as a guide for comparing products to determine what is most likely to be effective in your situation.

Directions

Assemble and review all available materials related to the products under consideration. Write the name of each product over one of the columns on the checklist. (If more than three products are being considered, use a second checklist.) For each product, work through each section of the checklist, indicating with a "Y" (Yes) those criteria that the product meets and with an "N" (No) those which it does not. If there is insufficient information to adequately judge an aspect of the product, indicate this with a question mark(?). That question can then be used as a guide for requesting any additional information from the publisher or sales representative.

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Products

PART I. THE INSTRUCTIONAL PRODUCT

1. OUTCOMES

☐ ☐ ☐ a. Are expected outcomes expressed in terms of observable proficiencies learners will acquire as a result of instruction?

☐ ☐ ☐ b. Are the outcomes, as a whole, worthwhile for your learners?

2. ASSESSMENT MATERIALS AND PROCEDURES

☐ ☐ ☐ a. Are placement measures and procedures included that clearly indicate the point at which a learner should begin instruction based on his current skill level?

☐ ☐ ☐ b. Are measures included that periodically identify specific outcomes on which the learner may be experiencing difficulty?

☐ ☐ ☐ c. Are end-of-program measures included that assess attainment of all outcomes?

3. REPORTS OF PREVIOUS USE

☐ ☐ ☐ a. Are data presented to indicate that outcomes have been consistently attained by previous users?

☐ ☐ ☐ b. Are data indicating teacher and pupil attitudes toward the product reported in quantitative terms and not just in the form of a few "endorsements"?

☐ ☐ ☐ c. Are data presented to show that the product has been used successfully in a wide range of situations, e.g., grade levels, school locations, and types of classroom organization?

☐ ☐ ☐ d. Do the data indicate that it is likely the product will be effective in your own instructional situation?

4. INSTRUCTIONAL MATERIALS AND PROCEDURES

☐ ☐ ☐ a. Are instructional materials and activities keyed directly to the expected instructional outcomes?

☐ ☐ ☐ b. Are the instructional materials likely to promote adequate learner interest and enthusiasm?

☐ ☐ ☐ c. Are materials or suggestions included for separate supplementary activities for those children not reaching acceptable achievement levels on any outcome?

☐ ☐ ☐ d. Are materials and procedures convenient and easy to use?

PART II. INSTALLATION OF THE PRODUCT

5. ORIENTATION AND TRAINING MATERIALS AND PROCEDURES

☐ ☐ ☐ a. Do the materials clearly identify and define the responsibilities of all personnel involved in product use, e.g., teachers, principals, supervisors, paraprofessionals?

☐ ☐ ☐ b. Do the materials include convenient and efficient resources (e.g., pre-program workshops, self-study materials) to orient all personnel to their individual responsibilities?

☐ ☐ ☐ c. Are teachers provided with clear guidelines for instructional scheduling, i.e., start-up dates, daily or weekly instructional time allotments, pacing guidelines?

☐ ☐ ☐ d. Are teachers provided with clear expectations of product performance, i.e., individual and class achievement levels, and rates of instructional completion or progress?

6. REPORTING MATERIALS AND PROCEDURES

☐ ☐ ☐ a. Do the materials include means to generate and transmit frequent reports on individual and class achievement and progress to appropriate audiences, e.g., supervisors, principals, parents, district personnel?

☐ ☐ ☐ b. Do the materials include resources for the improvement of problems related to class achievement or rate of instructional completion?

7. TIME AND COST CONSIDERATIONS

☐ ☐ ☐ a. Are the time requirements for installing the product and conducting instruction acceptable to your own situation?

☐ ☐ ☐ b. Are the costs of installing and using the product acceptable to your own situation, e.g., initial materials costs, replacement costs, released time for training personnel, additional personnel requirements?

DESCRIPTIVE SUMMARY OF SOCIAL FAIRNESS CONSIDERATIONS

When reviewing instructional products for social fairness, two types of bias both in textual content and illustrations may be prevalent; 1) bias by commission (for example, demeaning or ridiculing females), and 2) bias by omission or underrepresentation (for example, ignoring past or present contributions made by Blacks to this nation). Regardless of the form of bias, the major issue for consideration is:

> Do the illustrations and textual content of the instructional materials portray all individuals and groups as equal members of society without stereotyping any group in terms of occupation, interests, activities, abilities, personality characteristics, physical appearance, language or other stereotyped roles?

OCCUPATION

All groups should have the same range of career options. No group should be type cast into particular occupational roles. For example, females should be shown outside the home in a wide variety of occupations and trades. They should be portrayed in roles traditionally held by men, such as engineers and doctors, and should be portrayed equally with males at high professional levels. Males should not always be portrayed as the breadwinners or sole support of the family and some times should be shown in roles traditionally held by women, such as teachers, nurses and librarians. Minority groups also should not be type cast into occupational roles, such as Indians as Indian braves and medicine men, Japanese as gardeners or Mexican Americans as field workers. No matter what group is portrayed, the emphasis should be on varied role opportunities rather than stereotypes or reverse-stereotypes.

INTERESTS/ACTIVITIES/ENVIRONMENTS

All groups should be shown as having access to similar types of interests and activities, and should be portrayed in a range of environments. Stereotypic portrayal of females/minority groups in passive roles and males/Caucasians in active roles should be avoided. For example, girls as well as boys should be shown actively participating in athletic sports and boys as well as girls should exhibit an interest in art, poetry and music. No particular group should be singled out for portrayal in negative environments such as prisons.

ABILITIES/PERSONALITY CHARACTERISTICS

All groups should be shown as individuals having the same range of abilities and personality characteristics. Positive traits stereotypically attributed to one group should be attributed equally to other groups. For example, males as well as females should be praised for compassion and gentleness, and minority groups as well as the majority group should be praised for skillfulness, competence and aggressiveness. Minority groups should not be stereotypically portrayed as subservient, weak, hostile, savage, cheap, or lazy. All groups should equally be assigned leading and secondary roles. For example, Blacks, like all other groups, should be portrayed in positions of centrality and leadership, excelling in a broad range of areas -- not just sports and the entertainment field.

PHYSICAL APPEARANCE

Illustrations should accurately reflect the features of the particular group(s) being portrayed, but physical appearance stereotypes should be avoided. For example, color shouldn't be smudged over the drawings of Caucasians to represent Cubans, Blacks, Orientals, Mexican American or Indians; females should not always be portrayed in pastels and soft lines, nor be always shown wearing aprons or having flawless features and beautiful figures; males should not always be depicted as being heavier, taller and physically stronger than females. All groups should be described on the same dimension of attributes. For example, females should not be described according to physical appearance when males are being described according to ability.

LANGUAGE

Language should be void of derogatory words and phrases that stereotype and demean the worth of individuials or groups. Statements that demean one sex, or demean one sex at the expense of the other, such as 'She's only a girl' or 'He acts like a girl' should be avoided. When references are being made to people in general, universal rather than gender-specific words should be used to avoid the stereotypic assignment of roles to a particular sex. For example, the pronoun "they" or nouns ending in "person," "operator" or "agent" should be used instead of the pronoun "he" or words ending in "man" (e.g., police officers vs. policemen). Language used to describe the sexes should be parallel. For example, 'Mr. and Mrs. Jones' or 'husband and wife' should be used, instead of 'Mr. Jones and his wife,' or 'man and wife.'

PLURALISM

All groups should be portrayed accurately according to their lifestyles, yet different groups should be shown interacting together at equal levels. For example, minority groups should not continually be molded to fit middle class environments, nor should majority groups be shown in the foreground with minority groups as 'background' figures. A positive image should be promoted for all groups in terms of dignity, worth and importance, coupled with mutual respect and understanding among various cultures.

Errors of omission in instructional products, although generally less obvious than errors of commission, are equally important to identify when reviewing instructional products for social fairness. The examples provided below illustrate types of omission/underrepresentation which may be found in existing instructional products. Instructional products should not be characterized by failure to:

- Provide illustrations of minorities/women.
- Present minorities/women in positions of importance, authority and centrality.
- Present minorities in integrated group settings.
- Present minorities/women as characters of balance (e.g., white and black scientist working together; male/female doctor working together).
- Present the past and present contributions made by various groups to American society (History texts).
- Present minorities/women in a manner which promotes understanding, acceptance, respect, and a positive self concept.
- Present minorities in positive urban, rural and suburban environments.
- Present occurrences of racial/cultural problems and conflict coupled with an honest, objective analysis of the situation directed towards reducing conflict and resolving social problems.
- Present minorities in accurate yet varied settings rather than constant portrayal in white middle class environments.

CHECKLIST OF CONSIDERATIONS FOR SOCIAL FAIRNESS IN INSTRUCTIONAL PRODUCT

The primary instrument provided for screening instructional products is the checklist located in the "Considerations in Selecting Instructional Products" booklet. This social fairness checklist may be used in addition to the main checklist. Modify the checklist as needed to meet the needs of your particular situation.

Directions

Write the name of each product over one of the columns on the checklist. (If more than three products are being considered, use a second checklist.) For each product, work through the checklist, indicating: "Y" (Yes) for those criteria the product meets, "N" (No) for those criteria the product doesn't meet, and "NA" (Non Applicable) for those criteria that do not apply to the product under consideration.

Determining whether a given product meets the criteria will involve some amount of personal judgment. It is unlikely that any product will meet the criteria 100% of the time. In fact, the producers of materials often provide a range of roles with a range of groups over a series or number of stories or materials. This requires that those examining materials for social fairness base their assessment on a cumulative general review of the instructional content, rather than isolated and particular instances. Unless there are specific examples of social unfairness flagrant enough to render the entire product unacceptable, the review is better focused on social fairness in the broader context rather than in isolated instances. Therefore, when using the checklist, if the product meets the criteria to a degree which you feel is reasonable, indicate this with a "Y". Where an "N" is indicated, you may wish to use the back of the checklist and additional sheets as necessary to identify the specific deficiencies.

It is possible for reviewers to "read into" the materials interpretations which are unique to the reviewer. What a reviewer "sees" in materials is in part a function of the reviewer as well as of the materials. To protect against personal bias in influencing product selection, independent reactions of more than one reviewer can be obtained. The greater the independent agreement, the less likely the reviewer bias.

When sufficient information is not available for adequately rating the product, be sure to request additional information from the publisher or sales representative.

CHECKLIST OF CONSIDERATIONS FOR SOCIAL FAIRNESS IN INSTRUCTIONAL PRODUCTS

Products

☐ ☐ ☐ 1. OMMISSION/UNDERREPRESENTATION. Are specific groups, in the main, unnecessarily omitted or underrepresented?

☐ ☐ ☐ 2. OCCUPATION. Are various groups portrayed equally in a variety of occupational roles and at similar levels of authority or importance?

☐ ☐ ☐ 3. INTERESTS/ACTIVITIES/ENVIRONMENTS. Are various groups shown having similar interests, participating in the same types of activities, and operating in a similar range of environments.

☐ ☐ ☐ 4. ABILITIES/PERSONALITY CHARACTERISTICS. Are various groups shown having the same range of abilities and personality characteristics, including equal portrayal in both leading and secondary roles?

☐ ☐ ☐ 5. PHYSICAL APPEARANCE. Are various groups portrayed non-stereotypically in terms of physical appearance, and described on the same dimension of attributes?

☐ ☐ ☐ 6. LANGUAGE. Is the language void of derogatory words and phrases that stereotype and demean the worth of individuals or groups? Is parallel language used when describing the sexes, and are universal rather than gender specific words used where appropriate?

☐ ☐ ☐ 7. PLURALISM. Are various groups portrayed accurately according to their lifestyles, yet in interaction with one another? Is the worth, dignity, and mutual understanding and respect promoted among all groups?

STAGE 4

IMPLEMENTING THE SELECTED PROGRAM

- Planning for implementation
- Training implementing teachers
- Building support mechanisms

The linking agent plays an important role in helping school personnel implement the selected program. Successful implementation involves careful planning, re-education of staff, and building personal and organizational support mechanisms.

Planning for implementation

The selection of staff to implement the program is an early planning decision that must be made. The school district must decide whether implementation will be voluntary or mandatory and whether to begin the program in all classes or pilot test it during the first year in a limited number of classes. In making this decision, the district will need to carefully weigh the pro's and con's. Voluntary implementation may result in a divided staff at odds over the selected innovation.

On the other hand, mandatory implementation may set the teaching staff at odds with the administration. The planning group will need to consider whether the process leading to the selection of this particular innovation has resulted in support strong enough to warrant involving all eligible teachers at once or whether a gradual involvement would be better.

If a decision is made to pilot test the program, time limits should be set and criteria for effectiveness should be established. The selection of pilot teachers is a very important issue. Volunteer teachers are likely to work hard, but may not be representative of all teachers or grades for which the program is intended. A random assignment by grade will provide information about the program at all the appropriate grades, but may involve teachers who are not interested in the program.

Financial resources will significantly affect the number of classes to be involved in the initial program. Teacher training costs, consultant costs, and substitute teacher costs must be considered along with the actual cost of the program's materials. The time it takes to begin a new program is another important planning consideration for the school district. The linking agent can aid school districts with this planning by helping them to develop implementation timelines and step-by-step plans. Written plans help all people involved to constantly check on the effectiveness of the program implementation. Adequate time must be allowed to train the teachers who will use the program, to order materials, to obtain necessary approval (from the principal, superintendent, school board), to clarify the roles of those involved in the program, to arrange for the necessary facilities and release times, and to determine how money for the program will be appropriated and from where it will come (district budget, entitlement monies, outside grants). The district must also decide which parts of the program will be used and in what order and the time of the program's start.

Training implementing teachers

With the implementation plans determined, the teachers who will use the program must be trained. The type of training and the amount of training must be decided first. Do teachers need only orientation to materials or do they need extensive training in new teaching approaches upon which the program is based? The content of the training depends on several considerations: the prior experience and knowledge of the implementing teachers, the complexity of the innovation and the dissimilarity between the existing program and the innovation being adopted.

Timing of training is important and has financial implications. Depending on the time available and the amount of training needed, the district may want to conduct a summer workshop, an after school course during the school year, or a series of on-going seminars during the implementation period. Training during the school year usually involves the expense of substitutes for in-training teachers. Districts may have difficulty finding enough substitutes if they want to train a large number of teachers. Summer training may require teacher stipends be paid; usually this is more costly than substitute pay. Training during the school year can be carried out immediately and has the benefit of permitting trainees to quickly assimilate their learnings.

The training should be conducted by people who are totally familiar with the new program, who are experienced trainers, and who understand the principles of adult learning. The trainers could be the developers or representatives of the program, teachers or administrators who have worked with the new program in this or other districts, or the linking agent. Before training begins, the linking agent and others involved in program planning should meet with the trainer to determine what will be offered, to share with the trainer the present skills of the teachers and their needs, and to identify needs that will not be covered during the training. For instance, the trainer may provide the teachers with extensive information about the program materials and teaching approaches, but may not be able to help the teachers fit the program into their curriculum. Advance knowledge of this allows the planning group to compensate.

Evaluation of the training can be done in two ways. The most common method is through the use of post-training reaction instruments. Such instruments provide valuable data concerning teacher satisfaction with the training, but do not tell whether the teachers have mastered the skills necessary for successful implementation. The other method of evaluation is the use of pre-post or post criterion referenced tests. These tests are matched to important program knowledge and skills and tell whether, as a result of the training, the teachers have mastered the necessary content. Such tests not only provide data on what the teachers have actually learned, but also help to identify skill areas where the teachers may need additional training.

The district should consider encouraging or requiring the principal and other key decision makers to attend the training. This helps the decision makers become more aware of the program, and also gives the implementing teachers a sense of administrative support. Other training considerations include the logistics of the training -- such things as scheduling the use of rooms, organizing the seating, and providing the necessary materials, coffee, etc. These little details, often left to the last minute, can cause annoying problems when the training sessions begins.

Building support mechanisms

As with all new programs, teachers are likely to experience some initial problems and failures. To prevent these problems from having a demoralizing effect, it is important to provide ongoing support mechanisms for the teachers. Classroom visits and consultations are often helpful for providing "at the shoulder" assistance. Weekly meetings conducted by the linking agent or the school principal allow teachers to share their problems and realize they are not unique. Meetings also provide the opportunity for teachers, as a group, to develop strategies for solving their problems to discuss what works and to identify areas where the teachers feel they need more training. It is important, however, that these meetings be structured around particular issues or problems and not serve simply as gripe sessions which can be even more demoralizing than no sessions at all.

Organizational Models of Social Program Implementation

Richard F. Elmore

All prescripts for action have to be simple. Action itself is simple, or else it doesn't happen.

---C. P. Snow

...(We) must understand that organization means delegation, and agencies, and bureaus, and technicians, and that the ideas that can survive delegation, that can be passed on to agencies and bureaus and technicians, incline to be ideas of a certain kind and of a certain simplicity: they give up something of their largeness and modulation and complexity in order to survive. The lively sense of contingency and possibility, and of those exceptions to the rule which may be the beginning of the end of the rule this sense does not suit well with the impulse of organization.

---Lionel Trilling

That is not it at all.
That is not what I meant, at all.

---T. S. Eliot

Understanding organizations is essential to the analysis of implementation. The present state of organizational theory does not support a single analytic model. Rather, there are at least four distinct models. Each emphasizes different features of organizations, and each gives a different view of the implementation process. The systems management model treats organizations as value-maximizing units and views implementation as

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an ordered, goal-directed activity. The bureaucratic process model emphasizes the roles of discretion and routine in organizational behavior and views implementation as a process of continually controlling discretion and changing routine. The organizational development model treats the needs of individuals for participation and commitment as paramount and views implementation as a process in which implementors shape policies and claim them as their own. The conflict and bargaining model treats organizations as arenas of conflict and views implementation as a bargaining process in which the participants converge on temporary solutions but no stable result is ever reached.

Over the past decade social reformers have come to feel much like T. S. Eliot's J. Alfred Prufrock: their accomplishments are a pale reflection of their intentions. The big ideas that have shaped social policy--maximum feasible participation, equality of opportunity, self-sufficiency, compensatory treatment, to name a few--seem to have become caricatures of themselves the moment they ceased to be ideas and began to be translated into action.[1]

Concern about the implementation of social programs stems from the recognition that policies cannot be understood in isolation from the means of their execution. A large collection of carefully documented case studies--in education, manpower, housing, and economic development--points consistently to the same basic pattern: grand pretensions, faulty execution, puny results.[2] A reasonably broad consensus has developed among analysts of social policy that the inability of government to deliver on its promises derives only in part from the fact that policies are poorly conceived. In some instances, policies are based on poor and incomplete understandings of the problems they are supposed to address. But in the largest number of cases it is impossible to say whether policies fail because they are based on bad ideas or because they are good ideas poorly executed.[3] Increasingly, policy analysts have begun to focus on the process by which policies are translated into administrative action. Since virtually all public policies are implemented by large public organizations, knowledge of organizations has become a critical component of policy analysis. We cannot say with much certainty what a policy is, or why it is not implemented, without knowing a great deal about how organizations function. As the epigraphs of C. P. Snow and Lionel Trilling suggest, the translation of an idea into action involves certain crucial simplifications. Organizations are simplifiers; they work on problems by breaking them into discrete, manageable tasks and allocating responsibility for those tasks to specialized units. Only by understanding how organizations work can we understand how policies are shaped in the process of implementation.

The Utility of Organizational Models

If knowledge of organizations is central to the analysis of implementation, then how do we go about putting that knowledge into a form useful for analysis? The single most important feature of organizational theory is its conceptual anarchy. When we look to the literature on organizations for guidance in the analysis of an important practical problem, such as implementation, we find a collection of conflicting and contradictory theories. This diversity of theories is a sure sign that knowledge in the field is "soft". This is not to say that it should be, or ever will be, "hard", but only that it is extremely difficult to use knowledge of this sort as the basis for analysis. Richard Nixon captured this difficulty nicely in his discussion of the intellectual underpinnings of policy analysis. "The problem of making sensible organizational changes," he argues, "is beyond the present capacity of the various organizational analysis traditions." He adds,

> (We) presently lack (a)...normative intellectual structure capable of guiding us effectively regarding organizational choice or modification...(We) lack even a language that will enable us to list, and talk about, the organizational alternatives in a helpful manner.[4]

So on this point we're stuck. Having established that analysis of the implementation problem requires knowledge of organizations, we find that there is no single, coherent body of organizational theory that will serve as the basis for analysis. There are two ways of coping with this impasse. One is to make an heroic attempt to synthesize all organizational theory into a tidy set of analytical precepts useful in the analysis of implementation. The other is to acquiesce in the present diversity of thought about organizations and try to distill from that diversity a finite number of distinguishable models that can be used to analyze the implementation problem. I've chosen the latter strategy, largely because I believe the former to be impossible. This approach does not speak to Nelson's plea for an "effective normative intellectual structure," since it doesn't result in a single set of prescriptions about how implementation should be organized, but it does speak to his plea for a language that supports the discussion of organizational alternatives.

Those familiar with Graham Allison's study of the Cuban missile crisis[5] will recognize that I have cribbed the idea of alternative organizational models directly from him. His was the initial insight, and his is the credit for demonstrating its analytical utility. Readers of Allison will notice, however, that I depart considerably from his treatment. In most instances the differences are attributable to the nature of the subject matter; defense strategy, not surprisingly, raises a set of problems considerably different from the implementation of social programs. Suffice it to say that Allison is not responsible for the use that others make of his ideas.

Viewing the implementation process through a number of different organizational models allows us to be specific about the organizational assumptions we make when we offer prescriptions for improving implementation. Different models, we will see, lead to quite different perceptions and conclusions. "What we see and judge to be important," Allison argues, "...depends not only on the evidence but also on the 'conceptual lenses' through which we look at the evidence."6 Neither policy analysts nor administrators have been particularly careful about specifying the organizational assumptions that shape their recommendations and actions. Analysts, by and large, have found organizational problems either uninteresting or insufficiently precise. Administrators have a direct stake in organizational problems, but can seldom indulge in the luxury of an extended analysis of organizational alternatives. The consequence of this failure to address organizational issues has been an embarrassingly large gap between the analyst's recommendations and the solutions implemented by administrators.7 Forcing analysts and administrators to think systematically about organizational alternatives might ultimately drive policy-making in the direction of feasible, or implementable, policies.

Some models are basically normative--they're based on strongly held opinions about how organizations ought to operate. Some models are descriptive--they attempt to capture the essential objective attributes of organizations. In some instances it's difficult to distinguish normative from descriptive elements. But in all instances the model is a simplification of reality, not a surrogate for it.8 No single model adequately captures the full complexity of the implementation process.

I will develop four organizational models representing the major schools of thought that can be brought to bear on the implementation problem. The systems management model captures the organizational assumptions of the mainstream, rationalist tradition of policy analysis. Its point of departure is the assumption of value-maximizing behavior. The bureaucratic process model represents the sociological view of organizations, updated to include recent research by students of "street-level bureaucracy" that bears directly on the analysis of social program implementation. Its point of departure is the assumption that the essential feature of organizations is the interaction between routine and discretion. The organizational development model represents a relatively recent combination of sociological and psychological theory that focuses on the conflict between the needs of individuals and the demands of organizational life. Finally, the conflict and bargaining model addresses the problem of how people with divergent interests coalesce around a common task. It starts from the assumption that conflict, arising out of the pursuit of relative advantage in a bargaining relationship, is the dominant feature of organizational life.

The most important aspect of these models, however, is not that they represent certain established traditions of academic inquiry. As we shall see, their major appeal is that each contains a common sense explanation for implementation failures. And each explanation emphasizes different features of the implementation process.

The format of the discussion will be the same for each model. I will first present a list of four propositions that capture the essential features of each model. The first proposition states the central principle of the model; the second states the model's view of the distribution of power in organizations; the third states the model's view of organizational decision-making; and the fourth gives a thumbnail sketch of the implementation process from the perspective of the model. I will then discuss how these assumptions affect the analyst's perception of the implementation process. In Allison's words, I will develop "a dominant inference pattern" that serves to explain why certain features of the implementation process are more important than others and to predict the consequences of certain administrative actions for the success or failure of implementation efforts. Finally, I will draw some examples from the current case literature on social program implementation that demonstrate the strengths and weaknesses of each model.

Some readers will no doubt chafe at the idea that highly complex bodies of thought about organizations can be reduced to a few simple propositions. My defense is that this is an exercise in the application of theory, not an exercise in theory building. The premium is on capturing the insights that each model brings to the problem, not on making the theory more elegant or defensible. I have tried mightily to avoid creating straw men. Each model is offered as a legitimate analytical perspective.

Model I: Implementation as Systems Management

Propositions:

1. Organizations should operate as rational value maximizers. The essential attribute of rationality is goal-directed behavior; organizations are effective to the extent

that they maximize performance on their central goals and objectives. Each task that an organization performs must contribute to at least one of a set of well-defined objectives that accurately reflect the organization's purpose.

2. Organizations should be structured on the principle of hierarchical control. Responsibility for policy-making and overall system performance rests with top management, which in turn allocates specific tasks and performance objectives to subordinate units and monitors their performance.

3. For every task an organization performs there is some optimal allocation of responsibilities among subunits that maximizes the organization's overall performance on its objectives. Decision-making in organizations consists of finding this optimum and maintaining it by continually adjusting the internal allocation of responsibilities to changes in the environment.

4. Implementation consists of defining a detailed set of objectives that accurately reflect the intent of a given policy, assigning responsibilities and standards of performance to subunits consistent with these objectives, monitoring system performance, and making internal adjustments that enhance the attainment of the organization's goals. The process is dynamic, not static; the environment continually imposes new demands that require internal adjustments. But implementation is always goal-directed and value-maximizing.

A frequent explanation for failures of implementation is "bad management." We generally mean by this that policies are poorly defined, responsibilities are not clearly assigned, expected outcomes are not specified, and people are not held accountable for their performance. Good management, of course, is the opposite of all these things, and therein lies the crux of the systems management model. The model starts from the normative assumption that effective management proceeds from goal-directed, value-maximizing behavior. Organizations are thought of as problem-solving "systems"--functionally integrated collections of parts that are capable of concerted action around a common purpose.[9]

Integration presupposes the existence of a controlling and coordinating authority. In the systems management model, this authority is called the "management subsystem"--"the source of binding pronouncements and the locus of the decision making process."[10] It provides "a means of insuring role performance, replacing lost members, coordinating the several subsystems of the organization, responding to external changes and making decisions about how all these things should be accomplished."[11] Hierarchical control is the single most important element insuring that organizations behave as systems.

The translation of policy into action consists of a deliberate, step-wise process in which goals are elaborated into specific tasks. Robert Anthony's discussion of planning and management control gives a succinct statement of the transition from policy to operations:

> Strategic planning is the process of deciding on objectives, on resources used to obtain these objectives, and on the policies that are to govern acquisition, use and disposition of these resources....Management control is the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives...(and) operational control is the process of assuring that specific tasks are carried out effectively and efficiently.12

These functions are distributed in descending order from the highest to lowest levels of the organization. Taken together, they describe a general set of decision rules for the optimal allocation of resources, tasks, and performance criteria among subunits of an organization.

For all its emphasis on hierarchical control, one would expect that the systems management model would make little or no allowance for the exercise of lower-level discretion by subordinates carrying out policy directives. In fact, this is not quite the case. The problem of subordinate discretion figures prominently in the literature of systems management. Understandably, the issue arose in a very visible way during the initial attempts to apply systems analysis to national defense planning. Defense planners found almost immediately that the ability of the management subsystem to control the performance of subunits was limited by the enormous complexity of the total system. Hence, a great deal hinged on discovering the correct mix of hierarchical control and subordinate discretion. Hitch and McKean call this process "sub-optimization," which they define as an "attempt to find optimal (or near optimal) solutions, but to sub-problems rather than to a whole problem of the organization in whose welfare or utility we are interested."13 In organizational terms, suboptimization consists of holding subunits responsible for a certain level of output but giving subunit managers the discretion to decide on the means of achieving that level. In business parlance, these subunits are called "profit centers," in the public sector they have been called "responsibility centers." Suboptimization provides a means of exercising hierarchical control by focusing on the output of subunits rather than on their technically complex internal operations.

In practice, suboptimization raises some very complex problems--selecting appropriate criteria of subunit performance, accounting for the unintended consequences, or spillovers, of one unit's performance on another's, and choosing the appropriate aggregation of functions for each subunit.14 But the notion of suboptimization gives the systems management model a degree of flexibility that is not often appreciated by its critics. It is not necessary to assume that all organizational decisions are centralized in order to assume that organizations are functionally integrated.15 If the outputs of delegated decisions are consistent with the overall goals of the organization, then there is room for a certain degree of latitude in the selection of means for achieving those outputs.

A great deal of behavior in organizations can be explained by examining devices of control and compliance. Some are easy to identify, some blend into the subtle social fabric of organizations. One common device is what Herbert Kaufman calls the "preformed decision." He argues that "organizations might disintegrate if each field officer made entirely independent decisions," so organizations develop ways of making decisions for their field officers "in advance of specific situations requiring choice":

> ...(Events) and conditions in the field are anticipated as fully as possible, and courses of action (for each set of events and conditions) are described. The field officer then need determine only into what category a particular instance falls; once this determination is made, he then simply follows a series of steps applicable to that category. Within each category, therefore, the decisions are "preformed."16

Much of the work of high-level administrators in the implementation process consists of anticipating recurrent problems at lower levels of the system and attempting to program the behavior of subordinates to respond to these problems in standardized ways.

But not all devices of control are so obvious. In a casual aside, Robert Anthony remarks that "the system (of management controls) should be so constructed that actions that operating managers take in their perceived self-interest are also in the best interests of the whole organization."17 An important ingredient of control, then, is to be found in the way people are socialized to organizations. Social psychologists Katz and Kahn observe that all organizations have "maintenance subsystems" for recruitment, indoctrination, socialization, reward, and sanction that "function to maintain the fabric of interdependent behavior necessary for task accomplishment."18 These devices are the basis for "standardized patterns of behavior required of all persons playing a part in a given functional relationship, regardless of personal wishes or interpersonal obligations irrelevant to the functional relationship."19 In plain English, this means that organizations often require people to put the requirements of their formal roles above their personal preferences. The effect is to enhance the predictability and control of subordinate behavior in much the same way as preformed decisions and suboptimization. The difference is that instead of shaping decisions, it is the decision-makers who are shaped.

The major appeal of the systems management model is that it can be readily translated into a set of normative prescriptions that policy analysts can use to say how the implementation process ought to work. From the model's perspective, effective implementation requires four main ingredients: (1) clearly specified tasks and objectives that accurately reflect the intent of policy; (2) a management plan that allocates tasks and performance standards to subunits; (3) an objective means of measuring subunit performance; and (4) a system of management controls and social sanctions sufficient to hold subordinates accountable for their performance. Failures of implementation are, by definition, lapses of planning, specification, and control. The analysis of implementation consists of finding, or anticipating these breakdowns and suggesting how they ought to be remedied.

Analysis is made a good deal easier in this model by virtue of the fact that organizations are assumed to operate as units; a single conception of policy governs all levels of an organization. Success or failure of the organization is judged by observing the discrepancy between the policy declaration and subordinate behavior. The analyst focuses on the "clarity, precision, comprehensiveness, and reasonableness of the preliminary policy," on "the technical capacity to implement," and on "the extent to which the actual outputs of the organization have changed in the expected direction after the introduction of the innovation."20 But in order for this conception of analysis to make any sense in organizational terms, one must first assume that policy-makers, administrators, and analysts have a common understanding of policy and have sufficient control of the implementation process to hold subordinates accountable to that understanding.

A great deal would seem to depend, then, on whether organizations can actually be structured on the assumptions of the systems management model. The empirical evidence is suggestive, but hardly conclusive. Herbert Kaufman, who has made a career of studying administrative compliance and control, concludes his classic study of the U.S. Forest Service with the observation that "overall performance comes remarkably close to the goals set by the leadership."21 This was accomplished using a set of management controls and social sanctions that closely approximate the systems management model. The net result is that "the Rangers want to do the very things that the Forest Service wants them to do, and are able to do them, because these are the decisions and actions that become second nature to them as a result of years of obedience."22 Much the same conclusions is reported by Jeremiah O'Connell in his study of the implementation of a major reorganization of a large insurance company. He sets out to demonstrate the effectiveness of an implementation strategy based on "unilateral" action by top management and on "economic values."23 The reorganization plan was a pristine example of suboptimization:

> Managers will have line responsibility for the accumulated results every week of a unit composed of seven to ten men....Line responsibility makes each...manager accountable for determining the use of his personal time. His record will be the combined record of his agency unit. On this record his performance will be evaluated, he will be recognized, and he will be compensated.24

O'Connell argues that the plan had its intended effect of putting "the best resources possible in the most promising markets," hence presumably increasing company profits.25

The distinctive feature of both these cases is strong management control in the presence of wide geographical dispersion, which suggests that large organizations can approximate the ideal of value-maximizing units. But neither example comes from the literature on social program implementation, and in the existing literature there are no examples that come close to approximating the ideal. One explanation for this is that the literature records only failures. Another is that social programs are characterized by chronically bad management. If we could find successful examples of implementation, one could argue, they would manifest all the essential attributes of the systems management model. This is an empirical question that requires more evidence than we presently have.

But there are at least two other explanations for the lack of systems management examples in the implementation literature, and both point to weaknesses in the model. The first is that the model completely disregards a basic element common to all cases of social program implementation: federalism. Regardless of how well organized an agency might be, its ability to implement programs successfully depends, to some degree, on its ability to influence agencies at other levels of government. In both of the examples cited above, the implementing agent is a direct subordinate of management; he is selected, indoctrinated, rewarded, and penalized by the same people who articulate policy. Where more than one agency is involved in the implementation process, the lines of authority are much more blurred. It is not uncommon for implementors of social policy to be responsible to more than one political jurisdiction -- to the federal government for a general declaration of policy and certain specific guidelines, and to a state or local unit for myriad administrative details. These jurisdictional boundaries are a permanent fixture of the American federal system; they exist not to enhance the efficiency of implementation but to protect the political prerogatives of state and local government. Insofar as it equates "success" of implementation with outcomes that are consistent across all levels of government, the systems management model is anti-federalist. A good example of this anti-federalist bias is Herbert Kaufman's study of management control in nine federal agencies. Six of the agencies in Kaufman's sample administered their own programs, three agencies administered programs through units of state and local government. Kaufman recognized the distinction, but chose to treat it as analytically unimportant:

> In the case of inter-governmental programs, we opted to treat the recipients of bureau-administered funds as though they were the subordinates of the administering agencies in order to sharpen the comparisons...between feedback practices in direct and intergovernmental administration, and we found this artificial convention useful even though it exaggerated some seeming shortcomings in some of the bureaus.[26]

Not surprisingly, Kaufman found that the two weakest agencies, in terms of his criteria of administrative feedback, were those that administered intergovernmental programs in areas where functions were understood to be primarily state and local--the Law Enforcement Assistance Administration and the U.S. Office of Education.[27] Far from an indictment of internal management in these agencies, his analysis turns out to be an unintentional affirmation of the strength of federalism in the face of administrative efficiency. The systems management model, then, fails to account for the weakness of management control across jurisdictional boundaries.

The second possible explanation for the lack of systems management examples in the literature on social program implementation is perhaps that the model is not intended to describe reality. Recall that all propositions on which the model is based are normative; they describe how organizations ought to function, not necessarily how they actually do. The distinction is not as disingenuous as it sounds. We frequently rely on normative models to help us evaluate performance, diagnose failure, and propose remedies, even though we understand perfectly well that they have very little descriptive validity. We do so because they provide useful ways of organizing and simplifying complex problems. In this sense, the test of a model is not whether it accurately represents reality, but whether it has some utility as a problem-solving device. The major utility of the systems management model is that it directs our attention toward the mechanisms that policy-makers and high-level administrators have for structuring and controlling the behavior of subordinates.

It is dangerous, however, to focus on the normative utility of the model to the exclusion of its descriptive validity. To say that the model simplifies in useful ways is not the same thing as saying that the implementation process should be structured around the model. This is a mistake that policy analysts are particularly prone to make, and it involves a peculiar and obvious circularity. If the fit between model and reality is poor, the argument goes, then the model should be used to restructure reality. Only then, the analyst concludes triumphantly, can it be determined whether the model "works" or not. A special form of this argument claims that social programs fail because policies are poorly specified and management control is weak. To the extent that we remedy these problems we can predict a higher ratio of successes to failures. The problem with this argument is that the definition of success is internal to the model, and it may or may not be shared by people who are actually part of the process. The systems management model will almost certainly "work" if everyone behaves according to its dictates. If we could make value maximizers of all organizations, then we could no doubt prove that all organizations are value maximizers. But the point is that participants in the implementation process don't necessarily share the norms of the model. And it is this fact that leads us to search for alternative models.

Model II: Implementation as Bureaucratic Process

Propositions:

1. The two central attributes of organizations are discretion and routine; all important behavior in organizations can be explained by the irreducible discretion exercised by individual workers in their day-to-day decisions and the operating routines that they develop to maintain and enhance their position in the organization.

2. The dominance of discretion and routine means that power in organizations tends to be fragmented and dispersed among small units exercising relatively strong control over specific tasks within their sphere of authority. The amount of control that any one organizational unit can exert over another--laterally or hierarchically--is hedged by the fact that, as organizations become increasingly complex, units become more highly specialized and exercise greater control over their internal operations.

3. Decision-making consists of controlling discretion and changing routine. All proposals for change are judged by organizational units in terms of the degree to which they depart from established patterns; hence, organizational decisions tend to be incremental.

4. Implementation consists of identifying where discretion is concentrated and which of an organizations repertoire of routines need changing, devising alternative routines that represent the intent of policy, and inducing organizational units to replace old routines with new ones.

We reach instinctively for bureaucratic explanations of implementation failures. "There was a major change in the policy," we say, "but the bureaucracy kept right on doing what it did before." Or alternatively, "When the bureaucracy got through with it, the policy didn't look anything like what we intended." Bureaucracy was not always a perjorative term; for Max Weber, it was a form of organization that substituted impersonal, effi- cient, and routinized authority for that based on personal privilege or divine inspiration. Lately, though, bureaucracy has become an all-purpose explanation for everything that is wrong with government. We use terms like "the bureaucracy pro- blem"[28] and "the bureaucratic phenomenon"[29] to describe behavior of public officials that is "inefficient, unresponsive, unfair, ponderous, or confusing."[30]

When we look behind these characterizations, the problems of implementing policies in bureaucratic settings can be traced to two basic elements: discretion and routine. As bureaucracies become larger and more complex, they concentrate specialized tasks in subunits. With specialization comes an irreducible discretion in day-to-day decision-making; the ability of any single authority to control all decisions becomes attenuated to the point where it ceases to be real in any practical sense. In the words of Graham Allison, factored problem-solving begets fractionated power.[31] With the growth of discretion also comes the growth of routine. Individuals and subunits manage the space created by discretion so as to maintain and enhance their position in the organization. They create operating routines in part to simplify their work but also to demonstrate their specialized skill in controlling and managing their assigned tasks. Individuals and subunits resist attempts to alter their discretion or to change their operating routines--in other words, they resist hierarchical management--because these things are a concrete expression of their special competence, knowledge, and status in the organization. The central focus of the bureaucracy problem, according to J. Q. Wilson, is "getting the front-line worker--the teacher, nurse, diplomat, police officer, or welfare worker--to do the right thing."[32] The job of administration is, purely and simply, "controlling discretion."[33]

The standard techniques of hierarchical management--budget and planning cycles, clearance procedures, reporting requirements, and evaluation systems--are the means by which high-level administrators attempt to structure the behavior of subordinates. To the front-line worker, though, these techniques are often incidental to the "real" work of the organization. The front-line worker's major concern is learning to cope with the immediate pressures of the job, and this requires inventing and learning a relatively complex set of work routines that go with one's specialized responsibility. This split between high-level administrators and front-line workers accounts for the quizzical, sometimes skeptical, look one often gets from teachers, social workers, and other front-line workers when they're asked about the implementation of the policy. "Policy?" they reply, "We're so busy getting the work done we haven't much time to think about the policy."

The bureaucratic procss model, then, traces the effect of lower-level discretion and routinized behavior on the execution of policy. The central analytical problem is to discover where discretion resides and how existing routines can be shaped to the purposes of policy. The major difference between systems management and bureaucratic process models is that former assumes that the tools of management control can be used to program subordinate behavior, while the latter posits the existence of discretion and operating routines as means by which subordinates resist control. The systems management model assumes that the totality of an organization's resources can be directed at a single coherent set of purposes--that organizations can be programmed to respond to changes in policy. The bureaucratic process model assumes that the dominant characteristic of organizations is resistance to change--not simply inertia (the tendency to move in one direction until deflected by some outside force), but as Donald Schon observes, "dynamic conservatism" (the tendency to fight to remain the same).[34] In the systems management model one assumes that, given the right set of management controls, subunits of an organization will do what they are told; in the bureaucratic process model, one assumes that they will continue to do what they have been doing until some way is found to make them do otherwise.

In the implementation of social programs, new policies must typically travel from one large public bureaucracy to another, and then through several successive lawyers of the implementing agency before they reach the point of impact on the client. Whether or not the policy has its intended effect on the client depends in large part on whether the force of existing routine at each level of the process operates with or against the policy.

It is frequently at the final stage of this process--the point of delivery from agency to client--that the forces of discretion and routine are most difficult to overcome. This problem is the central concern of students of "street-level bureaucracy." The growth of large public service agencies has created a distinguishable class of bureaucrat--one who shoulders virtually all responsibility for direct contact with clients, who exercises a relatively large degree of discretion over detailed decisions of client treatment, and who therefore has considerable potential impact on clients.35 From the client's perspective, the street-level bureaucrat is the government. Clients seldom, if ever, interact with higher-level administrators; in fact, most public service bureaucracies are deliberately designed to prevent this. Because of the frequency and immediacy of the contact between street-level bureaucrats and their clients, it is usually impossible for higher-level administrators to monitor or control all aspects of their job performance. Consequently, a significant distance opens up between the street-level bureaucrat and his superiors. This distance breeds autonomy and discretion at lower levels of the organization. The distinctive quality of street-level bureaucracy is that "discretion increases as one moves down the hierarchy."36

But this concentration of discretion at lower levels has a paradoxical quality. For while street-level bureaucrats occupy the most critical position in the delivery process, their working conditions are seldom conducive to the adequate performance of their jobs. More often than not, they find themselves in situations where they lack the organizational and personal resources to perform their jobs adequately, where they are exposed regularly to physical or psychological threat, and where there are conflicting and ambiguous expectations about how they ought to perform their work.37 Social service delivery jobs are among the most stressful in our society. Street-level bureaucrats are expected to treat clients as individuals, but the high demand for their services forces them to invent routines for mass processing. High-level administrators and policy-makers are preoccupied with the way policy is expressed in legislation, regulations, and guidelines. But the major concern for the street-level implementor is how to control the stress and complexity of day-to-day work. Out of this concern grows a whole set of informal routines that students of street-level bureaucracy call "coping mechanisms."

Learning to cope with the stresses of service delivery means learning to rely on simple, standardized sources of information to clients--case histories, employment records, permanent school records, test scores, eligibility forms, and the like. It means developing a facility for classifying and labelling people simply and quickly--"an alcoholic parent," "a broken family," "a history of drug abuse," "violence-prone and resistant to authority," "can't hold a job," and so on. It means developing one's "faculties of suspicion" in order to spot people who pose a threat either to oneself or to the system one is administering. And it means using the formal procedures of the organization to strike an impersonal distance between oneself, as an individual, and the client.[38] All these mechanisms have the effect of reducing and controlling the stress and uncertainty of daily work, and for this reason they figure prominently in the implementation of social policy. On the other hand, they are not typically included in the policy-maker's or the high-level administrator's definition of "policy." More often than not, they're either ignored or regarded as external to the implementation process.

Concentrating on formal declarations of policy at the expense of informal coping routines means that "even the most imaginative manipulations of goals, structure, staff recruitment, training and supervision may...represent only superficial changes...rather than the fundamental reforms hoped for."[39] From the perspective of the bureaucratic process model, major shifts in policy have little or no effect until they reach the final transaction between service giver and client. The elaborate superstructure of regulations, guidelines, and management controls that accompany most social programs tend to have weak and unpredictable effects on the delivery of social services because street-level bureaucrats and their clients develop strong patterns of interaction that are relatively immune to change. Implementation failures, from this point of view, are the result of a failure on the part of policy-makers to understand the actual conditions under which social services are delivered.

Empirical evidence demonstrating the effect of organizational routines on the implementation of social policy, while not extensive, is certainly compelling. Probably the first serious attempt to document the street-level effect of a major shift in policy was Miriam Johnson's study of how national manpower policy influenced the operation of local employment in California.[40] The employment service is in some respects the archetypal social service delivery system. Initiated and largely funded by the federal government, it is totally administered by the states under broad guidelines from the federal level. The essential transactions of the employment service, however, occur at the street level, where employers and prospective employees are matched. Prior to the mid-sixties, the state employment services operated largely as labor exchanges; their purpose was simply to match the best person with the available job. During the mid-sixties, new federal manpower policies emphasized the services' responsibility to undertake remedial programs designed to get the poor and unskilled into the labor market. Then, in the early seventies, growing skepticism about the services' ability to help the disadvantaged resulted in a shift back to the original conception of the labor exchange. Johnson gives a client's-eye view of what it was like to deal with the employment service in each of these periods.

In the first phase--the labor exchange--the client's transaction with the employment service was dominated by the impersonal reception line and counter that separated client from bureaucrat. "There was no way for an applicant to bypass the line," she says, because only by waiting in line could the appplicant get the required forms.

> The reception line led to the counter, which stood as a rampart, a boundary that defined the combat areas. It protected and defended the public agency from assault and harassment, from the public it served, from "they"--the enemy.

When California State Employment Service began to respond to the federal mandate to provide services for the disadvantaged, it did so by initiating small, experimental projects rather than attempting wholesale reform of the agency. The employment service workers who participated in these projects were given a great deal of latitude in designing them, and the first things they eliminated were the reception line and the counter. For Johnson, these actions were evidence that workers were just as oppressed by the routines of the old system as clients.[42] The counter was replaced by more informal, less structured interactions that often took the form of group counseling sessions. But these experimental projects "had no significant effect on the designers of new manpower programs and delivery systems."[43] The remainder of the employment service seemed largely unaffected by the experimental projects.

With the return to the labor exchange idea in the early seventies, employment services looked pretty much the same as they always had, but there was one interesting and seemingly minor difference in operating routines at the local level:

> There was still a counter...and there was still a receptionist...(But) on the public side of the counter was something of value,...access to the jobs themselves. A Job Information Center was required in all...local offices by 1970....The area was open to the public and it was not necessary to be registered for work in order to use the..... Center. [It] was a self-screening operation in which the office supplied the referral information at the request of the applicant.[44]

It is ironic, after all the bombast and rhetoric of social action in the mid-sixties, that the net effect on the employment service should be something as simple as moving job information from one side of the counter to the other. But the example illustrates both the enormous resilience and the great importance of lower-level discretion and operating routines. Experimental projects had very little effect on the day-to-day operations of local offices, and the one change that did occur might easily have been overlooked by an analyst less sensitive to street-level operations.

Another important example of street-level response to high-level policy is the Weatherly and Lipsky analysis of the Massachusetts Comprehensive Sepcial Education Law.[45] The law is a carefully conceived effort to put an end to arbitrary and discriminatory treatment of handicapped children by the public school system. Each local school district is required to provide an individualized evaluation of a child's needs by a team that includes teachers, specialists, and parents. The evaluation is to result in a plan for each child, outlining the services the school system will offer. If the school system cannot provide the services required, it must pay to have them provided elsewhere. To the extent possible, handicapped children must be included in regular classrooms. And the traditional labels that had stigmatized children with special problems were to be eliminated.

During the first year of its implementation (1974-75), state and local administrators began to discover that the law imposed burdens "well beyond the capacity of any school system."[46] Implicit in the implemented program was a cruel dilemma. On the one hand the law required individualized treatment but on the other it created such an enormous administrative burden at the local level that educators were forced to develop routines for mass processing.[47] Local educators developed simple decision rules for differentiating more and less difficult cases; the loudest, most disruptive children were referred for evaluation first; children with easily identified, routine problems were processed perfunctorily, while those with more complex problems or "disruptive" parents were treated more circumspectly; teachers and administrators collaborated to reduce referrals when the burden became too heavy.[48] The evaluation conferences, which brought together teachers, specialists, and parents, tended to be characterized by largely negative assessments of children, the use of technical jargon, and preoccupation with the assignment of blame--all of which enhanced the position of professionals over parents and made the assessment procedure move more smoothly.[49] The traditional labels for childrens' problems were eliminated, but new, more euphemistic labels were invented.[59] In other words, routinization at the local level largely undermined the broad purposes of the law.

The basic problem, Weatherly and Lipsky point out, was not that local school personnel were determined to subvert the law. On the contrary, they made great personal sacrifices to make it work. The real problem was that the law reflected absolutely no understanding of how street-level bureaucrats respond to changes in policy and the increased workloads they entail. Faced with a broad legislative mandate and a large, complex new responsibility, local implementors invented operating routines that helped simplify their work but ran counter to the intent of the legislation.

The major advantage of the bureaucratic process model is that it forces us to contend with the mundane patterns of bureaucratic life and to think about how new policies affect the daily routines of people who deliver social services. Policy-makers, analysts, and administrators have a tendency to focus on variables that emphasize control and predictability, often overlooking the factors that undermine control and create anomalies in the implementation process. Bureaucratic routines operate against the grain of many policy changes because they are contrived as buffers against change and uncertainty; they continue to exist precisely because they have an immediate utility to the people who use them in reducing the stress and complexity of work. Failing to account for the force of routine in the implementation of policy leads to serious misperceptions.

Walter Williams argues that most implementation problems grow out of a division of labor between what he calls the "policy and and operations spheres."[51] In the policy sphere, people tend to focus on global issues and general shifts in the distribution of power among governmental units. Consequently, when the responsibility for implementation shifts to the operations sphere there is little in the way of useful guidance for implementors. The limited case literature on the role of bureaucratic routines bears out this observation. The unresponsiveness of large public bureaucracies to new policy initiatives is more often than not attributable to a failure to connect the "big ideas" of policy-makers with the mundane coping mechanisms of implementors.

Unlike the systems management model, the bureaucratic process model does not give any clear-cut prescriptions for improving the implementation process. About the only normative advice offered by students of street-level bureaucracy is the rather weak suggestion that "bureaucratic coping behaviors cannot be eliminated, but they can be monitored and directed" by rewarding "those that most closely conform to preferred public objectives (and) discouraging objectionable practices."[52] What this prescription overlooks is that coping routines derive their appeal and resilience from the fact that they are rooted in the immediate demands of work; they are, then, almost generically immune to hierarchical control. It's difficult, within the context of the bureaucratic process model, to think of ways to change street level behavior in a predictable fashion. But, as we shall see in the following section, it's not at all difficult to solve this problem when we adopt the perspective of another model.

The utility of the bureaucratic process model shouldn't hang entirely on its limited normative power, though, since its major advantages are descriptive: it captures a very common pattern of implementation failure, in which hierarchical controls generated by top management to alter the behavior of subordinates, or by one government agency to structure the behavior of another, simply fail to affect the important street-level transactions that determine the success of a policy.

Model III: Implementation as Organizational Development

Propositions:

1. Organizations should function to satisfy the basic psychological and social needs of individuals--for autonomy and control over their own work, for participation in decisions affecting them, and for commitment to the purposes of the organization.

2. Organizations should be structured to maximize individual control, participation, and commitment at all levels. Hierarchically structured bureaucracies maximize these things for people in upper levels of the organization at the expense of those in lower levels. Hence, the best organizational structure is one that minimizes hierarchical control and distributes responsibility for decisions among all levels of the organization.

3. Effective decision-making in organizations depends on the creation of effective work groups. The quality of interpersonal relations in organizations largely determines the quality of decisions. Effective work groups are characterized by mutual agreement on goals, open communication among individuals, mutual trust and support among groups members, full utilization of members' skills, and effective management of conflict. Decision-making consists primarily of building consensus and strong interpersonal relations among group members.

4. The implementation process is necessarily one of consensus-building and accommodation between policy-makers and implementors. The central problem of implementation is not whether implementors conform to prescribed policy but whether the implementation process results in consensus goals, individual autonomy, and commitment to policy on the part of those who must carry it out.

Another frequent explanation of implementation failures is that those who implement programs are seldom included in decisions that determine the content of those programs. The closer one gets to the point of delivery in social programs, the more frequently one hears the complaint that policy-makers and high-level administrators don't listen to service deliverers. What grates most on the sensibilities of teachers, social workers, employment counselors, and the like is the tacit assumption in most policy directives that they are incapable of making independent judgments and decisions--that their behavior must be programmed by someone else. It's difficult for persons who see themselves as competent, self-sufficient adults to be highly committed to policies that place them in the role of passive executors of someone else's will.

The prevailing theories of organizational behavior represented by the systems management and bureaucratic process models encourage and perpetuate this pathology. Hierarchy, specialization, routine, and control all reinforce the belief that those at the bottom of the organization are less competent decision-makers than those at the top. High-level administrators can be trusted to exercise discretion while those at the bottom must be closely supervised and controlled. Policy is made at the top and implemented at the bottom; implementors must set aside their own views and submit to the superior authority and competence of policy-makers and high-level administrators.

Nor surprisingly, this view has become increasingly difficult to defend as the work force has become more professionalized and better educated. It's now relatively clear that there are basic conflicts between the individual's need for autonomy, participation, and commitment and the organization's requirement of structure, control, and subordination. Concern for this conflict has led some to posit a "democratic alternative" to established theories of organization.[53] The label we will attach to this alternative is "organizational development." A number of schools of thought coexist within this tradition, but we will concentrate primarily on the work of Chris Argyris, who has spent an unusually large amount of effort specifying the assumptions on which his view is based.

Argyris begins with the observation that what we define as acceptable adult behavior outside organizations directly contradicts what's acceptable inside. On the outside, adults are defined as people who are self-motivating, responsible for their own actions, and honest about emotions and values. Inside organizations, adults are expected to exhibit dependency and passivity toward their superiors, they resort to indirection and avoid taking responsibility as individuals, and they are forced to submerge emotions and values.[54] Resolving this tension requires a fundamentally different kind of organization and a different theory of organizational behavior. Rational or bureaucratic theories of organization stress abstract, systemic properties--structure, technology, outputs--at the expense of the social and psychological needs of individuals.[55] The reasonable alternative is a theory that begins from the needs of individuals rather than the abstract properties of organizations. Such a theory leads "not only to a more humane and democratic system but to a more efficient one".[56]

The essential transactions of organizational life occur in face-to-face contacts among individuals engaged in a common task, that is, in work groups. Organizational effectiveness and efficiency depend more than anything else on the quality of interpersonal relations in work groups. Effective work groups are characterized by agreement on goals, open communication, mutual trust and support, full utilization of member skills, and effective management of conflict.[57] The cultivation of these attributes requires a special kind of skill, which Agryris calls "interpersonal competence" to distinguish it from the purely technical competence that comes from the routine performance of a task. Individuals are interpersonally competent when they are able to give and receive feedback in a way that creates minimal defensiveness, to give honest expression to their own feelings, values and attitudes, and to remain open to new ideas.[58] The trappings of bureaucracy and rational decision-making--routines, management controls, objectified accountability--undermine interpersonal competence and group effectiveness, encouraging dependence and passivity while penalizing openness and risk-taking. Hence, "the very values that are assumed to help make (an organization) effective may actually...decrease its effectiveness."[59]

Nowhere in the literature on organizational development is there a simple composite of the well-structured organization. It's fair to infer from the theory, though, that an effective organization would have at least the following features: most responsiblity for decisions would devolve to lower levels of the organization; the focus of organizational activity would be the work group, formed of people engaged in a common task; and information--statements of purpose, evaluative judgments, and expressions of needed changes--would be readily exchanged without negative social consequences at all levels of the organization. All these features originate from the simple assumption that people are more likely to perform at their highest capacity when they are given maximum control over their own work, maximum participation in decisions affecting them, and hence maximum incentives for commitment to the goals of the group.

The organizational development model gives quite a different picture of the implementation process than either the systems management or bureaucratic process models. In the systems management model, implementation consists of the skillful use of management controls to hold subunits accountable for well-defined standards of performance. In the bureaucratic process model, implementation consists of changing the formal and informal work routines of an organization to conform with a declaration of intent. In both instances, policy is made at the top and implemented at the bottom. But in the organizational development model the distinction is much less clear. If major responsibility is actually devolved to work groups at lower levels of the organization, it makes very little sense to think of policy as flowing from top to bottom. More about this in a moment.

Implementation failures are not the result of poor management control or the persistence of bureaucratic routines, but arise out of a lack of consensus and commitment among implementors. The features of the implementation process that matter most are those that affect individual motivation and interpersonal cooperation, not those that enhance hierarchical control. Success of an implementation effort can be gauged by looking at the extent to which implementors are involved in the formulation of a program, the extent to which they are encouraged to exercise independent judgment in determining their own behavior, and the extent to which they are encouraged to establish strong work groups for mutual support and problem-solving.

Empirical evidence on the underlying assumptions of the organizational development model is relatively scarce, but the most important piece of evidence in the area of social program implementation comes from a large-scale study done completely outside the organizational development tradition. In 1972, the federal government contracted with the Rand Corporation to conduct a nationwide study of four federally funded education programs, each of which was designed to encourage innovation in the public schools.60 The programs were administered by different units within the U.S. Office of Education and they used a variety of administrative strategies. Nearly 300 local projects were surveyed, so the potential for variation within and among programs was great. Yet the Rand analysts concluded that overall the "programs had approximately equal effects on project outcomes, despite their different management strategies."61 They also concluded that "differences between programs explained only a small amount of the variation in implementation outcomes."62 In short, the federal government's management of the programs seemed to have virtually no effect on the success or failure of implementation.

Pursuing this issue further, the Rand group analyzed 29 descriptive case studies of local project implementation, attempting to identify what distinguished successful from unsuccessful attempts at change. The characteristics that emerged from this analysis were (1) the existence of a strong local training component; (2) the use of local expertise and technical assistance in project implementation; (3) frequent and regular staff meetings; (4) local development of project materials; (5) the use of voluntary, highly motivated participants; and the like.63 What is significant about all these factors is that federal administrators have virtually no control over them. Project success depended primarily on the existence and mobilization of local resources. "Our observations suggest," the analysts concluded, "that it is extremely unrealistic to expect a school district to do something wise with its federal money if it is not alrady committed to something wise when the funds are first received."64

Milbrey McLaughlin, a principal author of the study, looked in detail at a number of projects that were intended to change classroom organization. Discussing the importance of local materials development, she observes that it was "sometimes undertaken because the staff felt they couldn't locate appropriate commercial materials," but she concludes that "the real contribution lay...in providing the staff with a sense of involvement and an opportunity to learn by doing." She continues,

> Working together to develop materials...gave the staff a sense of "ownership" in the project. It also broke down the traditional isolation of the teacher and provided a sense of professionalism and cooperation not usually available in the school setting. But even more important, development of materials provided an opportunity for users to think through the concepts which underlay the project in practical, operational terms....Although such "reinvention of the wheel" may not appear efficient in the short run, it appears to be a critical part of the individual learning and development necessary to significant change.65

Here, in the concrete language of project-level implementation, are the essential elements of the organizational development model: emphasis on individual motivation and commitment (sense of involvement, ownership in the project), the centrality of strong face-to-face work groups (breaking down the traditional isolation of teachers, enhancing professionalism and cooperation), and the explicit criticism of conventional notions of organizational efficiency (the usefulness of reinventing the wheel).

The picture of implementation that emerges from these findings is one in which the ability of policy-makers and high-level administrators to manipulate the behavior of implementors using the standard devices of hierarchical control is severely limited. The critical variables are those arising out of individual commitment and motivation. The Rand analysts described the implementation process as "intrinsically" one of "mutual adaptation"; the policy or innovation is shaped by implementors and, likewise, the behavior of implementors is shaped by the policy or innovation.66 The only way an innovation can become established in an organization, the Rand analysts argue, is for implementors to learn it, shape it, and claim it for their own.

But the full significance of the Rand findings is not adequately expressed by the plausible idea of mutual adaptation. Every defensible view of implementation contains some gesture toward adaptive behavior--in the systems management model, adaptation is a necessary consequence of feedback on the performance of subunits; in the bureaucratic process model, organizational routines evolve slowly over time in response to changing demands. So it's not the notion of adaptive behavior that distinguishes the organizational development model from other perspectives.

The real significance of the organizational development model, and the import of the Rand evidence, is that it effectively turns the entire implementation process on its head. It reverses what we instinctively regard as the "normal" flow of policy, from top to bottom. The message of the model is, quite bluntly, that the capacity to implement originates at the bottom of organizations, not at the top. In each of the two previous models the central problem was how policy-makers and high-level administrators could shape the behavior of implementors using the standard devices of hierarchical control. What the organizational development model suggests is that these devices explain almost none of the variation in implementation outcomes. The factors that do affect the behavior of implementors lie outside the domain of direct management control--individual motivation and commitment, and the interaction and mutual support of people in work groups. Hence, the closer one gets to the determinants of effective implementation, the further one gets from the factors that policy-makers and administrators can manipulate. The result is that, in terms of the effective structure of organizations, the process of initiating and implementing new policy actually begins at the bottom and ends at the top. Unless organizations already have those properties that predispose them to change, they are not likely to respond to new policy. But if they have those properties, they are capable of initiating change themselves, without the control of policy-makers and administrators. The role of those at the top of the system, then, is necessarily residual; they can provide resources that implementors need to do their work, but they cannot exert direct control over the factors that determine the success or failure of that work. If one accepts this view, the important business of implementation consists not of developing progressively more sophisticated techniques for managing subordinates' behavior but of enhancing the self-starting capacity of the smallest unit. The organizational capacity to accept innovations necessarily precedes the innovations themselves, so one can't expect individuals to respond to new policies unless they are predisposed to do so. But once this predisposition exists, it is no longer practical to think of imposing changes from above. The only conception of implementation that makes sense under these conditions is one that emphasizes consensus building and accommodation between policy-makers and implementors. Mutual adaptation exists not because it is a pleasing or democratic thing to do, but because it is the only way to insure that implementors have a direct personal stake in the performance of their jobs. This is what the advocates of organizational development mean when they say that more democratic organizations are also more efficient ones.

The organizational development model focuses on those aspects of an organization's internal structure that enhance or inhibit the commitment of implementors. The chief determinants of success are the sort of microvariables identified by the Rand analysts: materials development by implementors, strong interpersonal and professional ties among implementors, non-manipulative support by high-level administrators, and explicit reliance on incentives that elicit individual commitment from implementors rather than those designed to enforce external conformity. To the extent that the implementation process actually becomes these things, it is neither accurate nor useful to think in terms of a single declaration of policy that is translated into subordinate behavior. Policy does not exist in any concrete sense until implementors have shaped it and claimed it for their own; the result is a consensus reflecting the initial intent of policy-makers and the independent judgment of implementors.

The organizational development model also forces us to recognize the narrow limit of one organization's capacity to change the behavior of another. When an agency at one level of government attempts to implement policy through an agency at another level, the implicit assumption is that the former controls factors that are important in determining the performance of the latter.

The organizational development model suggests that those factors that have the greatest influence on the success or failure of implementation are precisely the ones over which external agencies have the least control. The maximum that one level of government can do to affect the implementation process is to provide general support that enhances the internal capacity of organizations at another level to respond to the necessity for change, independent of the requirements of specific policies. So, to the extent that the implementation process actually took the shape of the model, the federal government, for example, would invest most of its resources not in enforcing compliance with existing policies, but in assisting state and local agencies to develop an independent capacity to elicit innovative behavior from implementors.

The most powerful criticism of the organizational development model comes, surprisingly, from its strongest supporters. The bias of the model toward consensus, cooperation, and strong interpersonal ties leads us to ignore or downplay the role of conflict in organizations. The model, one of its advocates argues, "seems most appropriate under conditions of trust, truth, love, and collaboration. But what about conditions of war, conflict, dissent, and violence?" "The fundamental deficiency in models of change associated with organization development," he concludes, is that they "systematically avoid the problem of power, or the politics of change."67 The same criticism may be levelled, to one degree or another, against each of the three models discussed thus far, because none directly confronts the issue of what happens in organizations when control, routine, and consensus fail. A wide range of implementation problems can be understood only as problems of conflict and bargaining.

Model IV: Implementation as Conflict and Bargaining

Propositions:

1. Organizations are arenas of conflict in which individuals and subunits with specific interests compete for relative advantage in the exercise of power and the allocation of scarce resources.

2. The distribution of power in organizations is never stable. It depends exclusively on the temporary ability of one individual or unit to mobilize sufficient resources to manipulate the behavior of others. Formal position in the hierarchy of an organization is only one of a multitude of factors that determine the distribution of power. Other factors include specialized knowledge, control of material resources, and the ability to mobilize external political support. Hence, the exercise of power in organizations is only weakly related to their formal structure.

3. Decision-making in organizations consists of bargaining within and among organizational units. Bargained decisions are the result of convergence among actors with different preferences and resources. Bargaining does not require that parties agree on a common set of goals, nor does it even require that all parties concur in the outcome of the bargaining process. It only requires that they agree to adjust their behavior mutually in the interest of preserving the bargaining relationship as a means of allocating resources.

4. Implementation consists of a complex series of bargained decisions reflecting the preferences and resources of participants. Success or failure of implementation cannot be judged by

comparing a result against a single declaration of intent, because no single set of purposes can provide an internally consistent statement of the interests of all parties to the bargaining process. Success can only be defined relative to the goals of one party to the bargaining process or in terms of the preservation of the bargaining process itself.

Social programs fail, it is frequently argued, because no single unit of government is sufficiently powerful to force others to conform to a single conception of policy. With each agency pursuing its own interest, implementation does not pro- gress from a single declaration of intent to a result, but is instead characterized by constant conflict over purposes and results and by the pursuit of relative advantage through the use of bargaining. This diversity of purpose leads some parti- cipants to characterize programs as "failures" and some to characterize them as "successes," based solely on their position in the bargaining process. Conflict and bargaining occur both within and among implementing agencies. Single organizations can be thought of as semi-permanent bargaining coalitions, and the process of moving a declaration of policy across levels of government can be understood as bargaining among separate organizations.

Bargaining can be explicit or tacit. We tend to associate the notion of bargaining only with direct confrontations between well-defined adversaries--labor negotiations, arms limitation talks, and peace negotiations, for example. But many forms of bargaining, especially those in implementation, occur without direct communication and with an imperfect understanding by each party of the others' motives and resources.[68] Seen in this light, implementation becomes essentially a series of strategic moves by a number of individual units of government, each seeking to shape the behavior of others to its own ends.

The key to understanding bargaining behavior is recognizing that conflict implies dependency. Even the strongest adversaries must take account of their opponents' moves when they formulate a bargaining strategy. "The ability of one participant to gain his ends," Schelling observes, "is dependent to an important degree on the choices or decisions that the other participant will make." Furthermore, "there is a powerful common interest in reaching an outcome that is not enormously destructive of values to both sides."[69] In implementation, as in all important bargaining problems, parties with strongly divergent interests are locked together by the simple fact that they must preserve the bargaining arena in order to gain something of value. Failure to bargain means exclusion from the process by which resources are allocated. But the mutual advantage that accrues to participants in bargaining has little or nothing to do with their ability to agree explicitly on the goals they're pursuing, or their means for pursuing them. Mutual advantage results only from the fact that by agreeing to bargain they have preserved their access to something of value to each of them.

Lindblom uses the general term "partisan mutual adjustment" to characterize the variety of ways in which individuals with divergent interests coordinate their actions. The common element in all forms of bargaining behavior, he argues, is that "people can coordinate with each other without someone's coordinating them, without a dominant purpose, and without rules that fully prescribe their relations to each other."70 This point is essential for understanding the usefulness of the conflict and bargaining model in the analysis of social program implementation. The model permits us to make conceptual sense of the implementation process without assuming the existence of hierarchical control, without asserting that everyone's behavior is governed by a predictable set of bureaucratic routines, and without assuming that concerted action can proceed only from consensus and commitment to a common set of purposes. In short, the model provides a distinct alternative to the limiting assumptions of the previous three. Implementation can, and indeed does, proceed in the absence of a mechanism of coordination external to the actors themselves, such as hierarchical control, routine, or group consensus.

Bargained decisions proceed by convergence, adjustment, and closure among individuals pursuing essentially independent ends. Allison makes this point when he says that "the decisions and actions of governments are...political resultants...in the sense that what happens is not chosen as a solution to a problem but rather results from compromise, conflict, and confusion of officials with diverse interests and unequal influence."71 The term "resultant," appropriated from physics, emphasizes the idea that decisions are the product of two or more converging forces. The mechanism of convergence depends on what Schelling calls "interdependence of expectations." Parties to the bargaining process must predicate their actions not only on predictions of how others will respond but also on the understanding that others are doing likewise. So bargaining depends as much on shared expectations as it does on concrete actions.

> The outcome is determined by the expectations that each player forms of how the other will play, where each of them knows that their expectations are substantially reciprocal. The players must jointly discover and mutually acquiesce in an outcome or a mode of play that makes the outcome determinate. They must together find "rules of the game" or together suffer the consequences.72

In concrete terms, this means that much of the behavior we observe in the implementation process is designed to shape the expectations of other actors. An agency might, for example, put a great deal of effort into developing an elaborate collection of rules and regulations or an elegant system of management controls, knowing full well that it doesn't have the resources to make them binding on other actors. But the expectation that the rules might be enforced is sufficient to influence the behavior of other actors. The important fact is not whether the rules are enforced or not, but the effect of their existence on the outcome of the bargaining process.

The outcomes of bargaining are seldom "optimal" in any objective sense. More often than not, they are simply convenient temporary points of closure. Asking "what it is that can bring...... expectations into convergence and bring...negotiations to a close," Schelling answers that "it is the intrinsic magnetism of particular outcomes, especially those that enjoy prominence, uniqueness, simplicity, precedent, or some rationale that makes them qualitatively differentiable' from other alternatives.[73] In other words, the result of bargaining is often not the best nor even the second or third best alternative for any party; all parties can, and frequently do, leave the bargaining process dissatisfied with the result. As long as an opportunity to resume bargaining remains, there is seldom a single determinant result; all resolutions are temporary. So one should not expect the mechanisms of bargaining to lead teleologically from a single purpose to a result.

One is tempted to say that the conflict and bargaining model is not a model of organizational behavior at all, but a model of what happens when organizations fail. This argument is plausible. We tend to associate the term organization with a certain threshold of commonality that allows individuals to cooperate around a common set of goals. If this minimum condition isn't met, it seems reasonable to conclude that there is an absence of organization. Some time ago, though, the theory of organizations took a turn away from this assumption. Cyert and March, dissatisfied with the conventional wisdom of normative economic theory and the sociclogy of organizations, elaborated an alternative theory, beginning from the premise that organizations are essentially bargaining coalitions.[74] The process of organizational decision-making, they argue, involves continuous conflict among subunits over relatively specific purposes that define each subunit's interest in the organization. The overall goals of an organization, they argue, are calculatedly vague and essentially useless as guides to decision-making. Hence, organizations are not defined by agreement on overall purposes, but only by the process of conflict, bargaining, and coalition building among subunits. The absence of agreement on overall goals, then, is not a sign of organizational failure, but simply a clue directing our attention to the existence of conflict and bargaining as permanent fixtures of organizational life

The real structure of organizations, then, is to be found in their bargaining processes, rather than in their formal hierarchy or operating routines. Notions of top and bottom have very little meaning. Formal position is a source of power, but only one of many, and it does not necessarily carry with it the ability to manipulate the behavior of subordinates. Many other sources of power--mastery of specialized knowledge, discretionary control over resources, a strong external constituency, and so on--can be used to enhance the bargaining position of subordinates relative to superiors, and vice versa. No simple rules can be set forth for determining the distribution of power in organizations. Stability, if it exists at all, is the short-term product of bargaining on specific decisions.

This view leads to a conception of implementation considerably different from any of the other models. One understands the process by focusing on conflict among actors, the resources they bring to the bargaining process, and the mechanisms by which they adjust to each others' moves. Most important, the distinguishing feature of the conflict and bargaining model is that it doesn't rest on any assumptions about commonality of purpose. In each of the previous models, it was possible to say that successful implementation was in some sense dependent on a common conception of policy shared by all participants in the process. In the systems management model, agreement was the product of management control; in the bureaucratic process model, it resulted from incorporation of a new policy into an organization's operating routines; and in the organizational development model, it resulted from consensus among policy-makers and implementors. But in the conflict and bargaining model, the outcomes of implementation are temporary bargained solutions--resultants--that reflect no overall agreement on purposes.

Success or failure of implementation is therefore largely a relative notion, determined by one's position in the process. Actors who are capable of asserting their purposes over others, however temporarily, will argue that the process is "successful." Those with a disadvantage in the bargaining process will argue that the process is "unsuccessful." It is entirely possible for the process to proceed even when all actors regard it as unsuccessful, because the costs of refusing to bargain may exceed the costs of remaining in a disadvantageous bargaining relationship. Under these circumstances, the only objective measure of success or failure is the preservation of the bargaining process itself. So long as all parties agree to bargain and mutual benefit is to be gained from bargaining, preservation of the bargaining arena constitutes success. Regardless of the level of conflict in social programs, all actors have an interest in maintaining the programs as long as they deliver benefits that are not otherwise accessible.

The empirical evidence on conflict and bargaining in social program implementation is abundant. The implementation of federal educational programs provides some of the best examples, because the process occurs in a system where power is radically dispersed across all levels of government. The Elementary and Secondary Education Act of 1965 was intended not simply to increase federal expenditures on education but also to change the operation of state and local educational agencies. Title I of the Act was intended to focus attention and resources on educationally disadvantaged children at the local level; Title V was designed to enhance the administrative capability of state educational agencies. In both cases, the pattern of interaction among agencies at different levels of government suggests conflict and bargaining rather than simple progression from a purpose to a result. In its first five years, Title I went from a period of "good working relationships" and "friendly assistance" between the federal government and local agencies, through a stage of aggressive federal enforcement of program guidelines, and eventually back to a relatively passive federal role. Jerome Murphy demonstrates that the critical element in these shifts was a change in the nature of the bargaining arena in Title I. In the late sixties, civil rights organizations conducted a large-scale study of local abuses of Title I, confirming a widely held suspicion that funds were not being focused on disadvantaged children, and then mounted an aggressive political campaign to force the U.S. Office of Education to take a stronger posture in enforcing program guidelines. After a flurry of enforcement activity that generated a great deal of political counterpressure from state and local agencies, federal administrators backed away from aggressive enforce- ment.[75] In other words, federal policy--legislation, regulations, and guidelines--served only as a point of departure for bargaining among implementing agencies. Local implementors designed their actions around expectations about the willingness of federal administrators to enforce the policy. When federal administrators were forced to take a different posture, local administrators responded in part with compliance and in part with counterpressure. The policy actually implemented lies somewhere between the literal requirements of the law and regulations and the interests of local implementors. Another flurry of federal enforcement would alter the situation again.

In the implementation of Title V, the federal government dispensed relatively unrestricted funds to state educational agencies for use in strengthening their administrative capacities. Murphy found that, in the aggregate, Title V did not significantly change the activities or functions of state agencies. The dominant pattern was that "funds were distributed to satisfy the interests of important elements in the organization" and were "expended mainly to meet pressing problems through the simple expansion of existing modes of operation."[76] In other words, the infusion of federal funds simply touched off intra-organizational bargaining in which subunits claimed their share of the bounty and proceeded to use it for their own immediate purposes. In the few cases where significant changes in state agencies did occur, they came "only after strong pressure from outside the organization."[77] As in the case of Title I, it took a shift in the bargaining arena to force a change in the behavior of implementors.

The extremely diffuse and fluid nature of organizational relationships in the field of education has led Karl Weick to characterize educational organizations as "loosely coupled systems."[78] Although conflict and bargaining do not figure prominently in Weick's model, the characteristics of loosely coupled systems that he identifies lead to the same conclusions as the conflict and bargaining model. The lack of structure and determinancy, the absence of technologically linked events, the dispersion of resources and responsibilities, and the relative absence of binding regulation all add up to the kind of system in which concerned action is possible only through tacit or explicit bargaining among relatively independent actors.

The same pattern exists in a number of other studies of social program implementation. Pressman's analysis of the impact of federal programs on the city of Oakland concludes that action is possible in urban settings only when "effective bargaining arenas" exist to enforce "citizens'...demands on government and government's willingness to respond."[79] In the Pressman and Wildavsky study of the Economic Development Administration's job creation project in Oakland, a similar pattern was repeated. Federal administrators underestimated the complexity of local bargaining relationships and overestimated their ability to force a result consistent with their objectives.[80] Derthick's study of the Department of Housing and Urban Development's New Towns program concludes with the observation that federal programs succeed when "an adjustment between the federal program and local interests is worked out...with the net result...that programs are neither 'federal' nor 'local' but a blend of the two."[81] Cuomo's account of the attempts to locate a low-income public housing project in a middle-class neighborhood of Forest Hills, Queens, demonstrates how bargaining between local residents, city, state, and federal administrators converged on an outcome that satisfied no one but temporarily resolved the conflict.[82] And a recent article by Helen Ingram views federal grants-in-aid in terms of a bargaining model rather than the more traditional carrot and stick model.[83] The important characteristic of all these cases is that the participants in the bargaining process stood to gain more from bargaining than from not bargaining. A failure to bargain means a loss of access to goods that can be gained only by participation. Even the strongest of adversaries are locked together by the dependency of conflict.

The major contribution of the conflict and bargaining model to our understanding of social program implementation is the insight that parties to the implementation process needn't agree on anything except the necessity to bargain. The bargaining process, whether it occurs among individuals within organizations or among organizations at different levels of government, proceeds by convergence, adjustment, and closure rather than by hierarchical control or consensus. This feature of the model explains why it is such a powerful descriptive device; it allows us to interpret events without attributing an overall purpose to them. But this feature is also the model's greatest weakness: it does not allow us to posit an objective definition of success or failure, since all normative judgments are simply assertions of relative advantage in the bargaining process. The rationalist critique of the conflict and bargaining model is that it elevates confusion and mindless drift to the level of principle, that it provides an easy excuse for acquiescing in results that satisfy no one, and that it provides no basis for improving the implementation process. These criticisms are difficult to counter, except by observing that a failure to understand the intricacies of bargaining is sometimes more costly than a failure to agree on an objective measure of success.

Conclusion

In closing, two obvious but obligatory remarks are in order. The first is that models are necessarily constructs or ideal types. Nothing is immutable about the distinctions I have drawn here, nor do I make any pretense of having captured all that is important in the implementation process. What is useful about the models, I've argued, is that they draw on established traditions of organizational inquiry and they accord with certain common sense explanations of why social programs fail. The second observation is that the evidence on social program implementation is skimpy; the cases I've used are intended only to suggest that modest empirical support can be found for the assumptions underlying each of the models. This is not to suggest that any of the evidence is very solid or that there is any reason to believe that the evidence favors one model or another. It does suggest a great need for descriptive studies of social program implementation.

The more interesting question is, of what use is the notion of alternative models to the analysis of implementation? Granting that certain models highlight certain features of the process while concealing others, what use could one make of this fact? I would like to suggest, briefly, two possibilities; but before I do, one possible use of alternative models about which I am very skeptical, comes immediately to mind. This is the view that the models should be treated as rival hypotheses and that the gradual accumulation of empirical evidence will eventually prove some single model of the process superior to all others. This is unlikely to happen for two reasons. First, models contain not only descriptive information but normative information; in spite of empirical evidence that a process operates in a certain way, people can nevertheless persist in the belief that it ought to operate in another way. Second, people have the capacity to shape their behavior in response to models; a neat predictive model of an essentially political process, like implementation, invites people to behave in unpredictable ways to achieve their own ends. Given the diversity of opinion reflected in the four models presented here, it seems highly unlikely that the accumulation of evidence will lead to agreement. It will probably just reinforce the disagreement that currently exists. But, as I indicated above, two ideas about the use of alternative models are more promising.

The first is that applying different models to the same set of events allows us to distinguish certain features of the implementation process from others. In fact, every implementing agency probably has a set of management controls, a firmly entrenched collection of operating routines, some process for eliciting the involvement of implementors, and a set of internal and external bargaining relationships. The important question is not whether these elements exist or not, but how they affect the implementation process. One way of disentangling the effects of these factors is to analyze the same body of evidence from the perspective of several different models. This is the approach taken by Allison in his analysis of the Cuban missile crisis.

The second idea proceeds from the notion that certain kinds of problems are more amenable to solution when using one perspective than when using another. It is conceivable that in certain times and settings, the use of management controls is clearly appropriate, while in other circumstances only bargaining is appropriate. In some instances, wholesale delegation of discretion is the obvious course of action to follow, while in others firm control of discretion is necessary. The point is that models can help analysts and decision-makers distinguish among different kinds of problems. Using management controls in a system in which power is extremely diffuse, for example, is like using a crescent wrench to turn a phillips screw. The problem is to understand when certain tools of analysis and strategies of action are likely to pay off and when not.

Neither of these approaches requires complete agreement on the nature of the models or on the existence of a single model that captures all essential features of the process. They require only a willingness to treat certain parts of a complex process as analytically separate, plus a high tolerance for ambiguity.

FOOTNOTES

1. Work on this article was supported in part by a grant from the Policy Research and Analysis Division of the National Science Foundation to the Institute of Governmental Research at the University of Washington. The views expressed, however, are solely those of the author. The article will also appear in Making Chicago Happen? (New York: Teachers College Press, 1978), eidted by Dale Mann. Special thanks go to David Cohen, who originally suggested that I pursue this idea, and to Mark Moore, whose careful editorial work made my work much easier. Thanks also to Garry Brewer, Dale Mann, Derek Mills, Jerome Murphy, Richard Nelson, Fred Thompson, Michael Timpane, and Walter Williams for their comments and encouragement.

2. A number of these studies are collected in Walter Williams and Richard F. Elmore (eds.), Social Program Implementation (New York: Academic Press, 1976). Another collection, which focuses on the role of regulations in the implementation process, is a special number of Policy Sciences (7 (Winter 1976)), edited by Francine Rabinovitz, Jeffrey Pressman, and Martin Rein. Two major reviews of the literature on implementation are, Donald Van Meter and Carl Van Horn, "The Policy Implementation Process: A Conceptual Framework," in Administration and Society (6 (1974): 445-88) and Erwin Hargrove, The Missing Link: The Study of Implementation of Social Policy (Washington, D.C.: Urban Institute, 1975).

3. Walter Williams, "Implementation Problems in Federally-Funded Programs," in Williams and Elmore (eds.), Social Program Implementation, pp. 15-40.

4. Richard Nelson, "Intellectualizing about the Moon-Ghetto Metaphor: A Study of the Current Malaise of Rational Analysis of Social Problems," Policy Sciences 5 (1974): 398. This article has been expanded into a book, The Moon and the Ghetto (New York: Norton, 1977), that includes a number of case studies demonstrating what Nelson means by analysis of organizational alternatives. His framework differs considerably from the one developed here.

5. Graham Allison, Essence of Decision: Explaining the Cuban Missile Crisis (Boston: Little Brown, 1971).

6. Ibid., p. 2.

7. Ibid., p. 267. See also, Arnold Meltsner "Political Feasibility and Policy Analysis," in Public Administration Review ((November/December 1972): 859-67).

8. This distinction is developed at length in Ralph Strauch, "A Critical Look at Quantitative Methodology," in Policy Analysis 2 (1976): 121-44.

9. This account of the systems management model is drawn from the following sources: Daniel Katz and Robert Kahn, The Social Psychology of Organizations (New York: Wiley, 1966); William Baumol, Economic Theories and Operations Analysis, 3rd ed. (Englewood Cliffs, N.J.: Prentice Hall, 1972); Robert Anthony, Planning and Control Systems: A Framework of Analysis (Boston: Harvard Graduate School of Business Administration, 1965); C. West Churchman, The Systems Approach (New York: Delta, 1968); and Charles Hitch and Roland McKean, The Economics of Defense in a Nuclear Age (Cambridge, Mass.: Harvard University Press, 1963).

10. Katz and Kahn, The Social Psychology of Organizations, p. 79.

11. Ibid., p. 203. Cf. Churchman, The Systems Approach, p. 44.

12. Anthony, Planning and Control Systems, pp. 16-18.

13. Hitch and McKean, The Economics of Defense in a Nuclear Age, pp. 128-9, 396-402. Their choice of the term "sub-optimization" is perhaps unfortunate because to most of us it communicates the meaning "less than optimal," which is quite the opposite of the meaning they wish to convey. It is clear from their discussion that they intend the term to mean "optimizing at lower levels." Some writers, however, insist on using the term to mean less than optimal. See, e.g., Anthony, Planning and Control Systems, p. 35. Two other sources in which the term is used consistently with the meaning of Hitch and McKean are, Baumol, Economic Theories and Operations Analysis, p. 395n, and Richard Zeckhauser and Elmer Schaefer, "Public Policy and Normative Economic Theory," in Raymond Bauer and Kenneth Gergen (eds.), The Study of Policy Formation (New York: Free Press, 1968), pp. 73-6. A more recent treatment of suboptimization in policy analysis may be found in E.S. Quade, Analysis for Public Decisions (New York: Elsevier, 1975), pp. 95-8.

14. Hitch and McKean, The Economics of Defense in a Nuclear Age, p. 129.

15. Nor is it necessary to assume, as Graham Allison does, that a "rational" model of decision-making is one that treats all decisions as if they were the product of a single decision-maker (Allison, Essence of Decision, pp. 3, 28, 36). Most theories of rational choice encourage this view by using stock

phrases like "the decision-maker's problem," "the decision-maker's preference," etc. In organizational terms, though, the important issue is not whether the peculiar fiction of the single, value-maximizing decision-maker can be maintained, but whether it is possible to construct a set of organizational controls sufficient to integrate subunits of an organization into a functional whole. This is a point of difference between Allison's discussion and mine. In his rational actor model (Essence of Decision, pp. 10-38), he treats all decisions as the product of a single decision-maker, and this makes it very easy to criticize the model. My intention is to demonstrate that a substantial body of theory treats organizations as rational, value-maximizing units but does not depend on the fiction of the single decision-maker.

16. Herbert Kaufman, The Forest Ranger: A Study of Administrative Behavior (Baltimore: Johns Hopkins University Press, 1960), p. 91.

17. Anthony, Planning and Control Systems, p. 45.

18. Katz and Kahn, The Social Psychology of Organizations, p. 40.

19. Ibid., p. 40.

20. Walter Williams, "Implementation Analysis and Assessment," in Williams and Elmore, (eds.), Social Program Implementation, pp. 281-2

21. Kaufman, The Forest Ranger, p. 203.

22. Ibid., p. 228.

23. Jeremiah O'Connell, Managing Organizational Innovation (Homewood, Illinois: Irwin, 1968), p. 10.

24. Ibid., pp. 72 and 74.

25. Ibid., p. 13.

26. Herbert Kaufman, Administrative Feedback: Monitoring Subordinates' Behavior (Washington, D.C.: The Brookings Institution, 1973), p. 17.

27. Ibid., p. 68.

28. James Q. Wilson, "The Bureaucracy Problem," in The Public Interest (6) (Winter 1967): 3-9.

29. Michael Crozier, The Bureaucratic Phenomenon (Chicago: University of Chicago Press, 1964).

30. James Q. Wilson, Varieties of Police Behavior (New York: Atheneum, 1973), p. 1.

31. Allison, Essence of Decision, p. 80.

32. Wilson, Varieties of Police Behavior, pp. 2-3.

33. Ibid., p. 9; see also pp. 64ff.

34. Donald Schon, Beyond the Stable State (New York: Random House, 1971), p. 32.

35. Michael Lipsky, "Towards a Theory of Street-Level Bureaucracy," in Willis Hawley and Michael Lipsky (eds.), Theoretical Perspectives on Urban Politics (Englewood Cliffs, N.J.: Prentice Hall, 1976), p. 197.

36. Wilson, Varieties of Police Behavior, p. 7.

37. Lipsky, "Toward a Theory of Street-Level Bureaucracy", pp. 197-8.

38. Ibid., pp. 201ff.

39. Richard Weatherly, "Toward a Theory of Client Control in Street-Level Bureaucracy," unpublished paper, School of Social Work, University of Washington, 1976, p. 5.

40. Miriam Johnson, Counter Point: The Changing Employment Service (Salt Lake City, Utah: Olympus, 1973).

41. Ibid., p. 21.

42. Ibid., pp. 63-4.

43. Ibid., pp. 85-6.

44. Ibid., p. 109.

45. Richard Weatherly and Michael Lipsky, "Street-Level Bureaucrats and Institutional Innovation: Implementing Special-Education Reform," in Harvard Educational Review 47 (May 1977): 171-97.

46. Ibid., p. 180.

47. Ibid., p. 182

48. Ibid., pp. 186-7.

49. Ibid., pp. 189-90.

50. Ibid., pp. 192-3.

51. Walter Williams, "Implementation Problems in Federally Funded Programs," in Williams and Elmore (eds.), Social Program Implementation, pp. 20-23.

52. Weatherly and Lipsky, "Street-Level Bureaucrats and Institutional Innovations," p. 196.

53. See, e.g., Katz and Kahn, The Social Psychology of Organizations, pp. 211ff.

54. Chris Argyris, Personality and Organization: The Conflict Between System and Individual (New York: Harper, 1957), pp. 53ff.

55. Chris Argyris, The Applicability of Organizational Sociology (London: Cambridge University Press, 1972), passim.

56. Warren Bennis, Organization Development: Its Nature, Origins, and Prospects (Reading, Massachusetts: Addision-Wesley, 1969), p. 28.

57. Ibid., p. 2 (quoting Douglas McGregor, The Professional Manager (New York: McGraw Hill, 1967)).

58. Chris Argyris, Interpersonal Competence and Organizational Effectiveness (Homewood, Illinois: Irwin, 1962) p. 42.

59. Chris Argyris, Integrating the Individual and the Organization (New York: Wiley, 1964), p. 138.

60. The results are reported in a five-volume study, Federal Programs Supporting Educational Change (Santa Monica, California: Rand Corporation, 1975). The principal authors are Paul Berman, Milbrey McLaughlin, Dale Mann, Peter Greenwood, and John Pincus. A number of other researchers, including this author, worked on parts of the study.

61. Paul Berman and Milbrey McLaughlin, Federal Programs Supporting Educational Change, Vol. IV: The Findings in Review (Santa Monica, California: Rand Corporation, 1975), p. 22.

62. Ibid., see also pp. 45-7.

63. Berman and McLaughlin, Federal Programs Supporting Educational Change, Vol. III: The Process of Change, p. 39.

64. Ibid., p. 26.

65. Milbrey McLaughlin, "Implementation as Mutual Adaptation: Change in Classroom Organization," in Williams and Elmore (eds.), Social Program Implementation, pp. 172-3.

66. Berman and McLaughlin, Federal Programs Supporting Educational Change, Vol. III: The Process of Change, pp. 3, 31.

67. Bennis, Organization Development, p. 77; emphasis in original.

68. An elegant account of tacit bargaining and coordination is given in Thomas Schelling, The Strategy of Conflict (London and New York: Oxford University Press, 1963), pp. 53ff.

69. Ibid., pp. 5-6.

70. Charles Lindblom, The Intelligence of Democracy: Decision Making Through Mutual Adjustment (New York: Free Press, 1965), p. 3. In the interest of economy of expression, I have taken some liberties with Lindblom's terminology. Lindblom actually develops no fewer than twelve distinguishable types of partisan mutual adjustment, based on different assumptions about the ability of parties to determine the effect of their actions on others, the level of communication among parties, their ability to use conditional threats, and their ability to elicit behavior using unilateral action (pp. 33-84). I have equated bargaining with partisan mutual adjustment, where in Lindblom's scheme bargaining is one particular type of partisan mutual adjustment involving the use of conditional threats and promises (pp.71ff.).

71. Allison, Essence of Decision, p. 162.

72. Schelling, The Strategy of Conflict, pp. 106-7.

73. Ibid., p. 70; Lindblom, The Intelligence of Democracy, pp. 205-225.

74. Richard Cyert and James March, A Behavioral Theory of the Firm (Englewood Cliffs, New Jersey: Prentice Hall, 1963), p. 27.

75. Jerome Murphy, "The Education Bureaucracies Implement Novel Policy: The Politics of Title I of ESEA, 1965-72," in Alan Sindler (ed.), Policy and Politics in America (Boston: Little Brown, 1973), pp. 160-98. See also Milbrey McLaughlin,

"Implementation of ESEA Title I: A Problem of Compliance," in Teachers College Record 77 (1976): 397-415.

76. Jerome Murphy, "Title V of ESEA: The Impact of Discretionary Funds on State Education Bureaucracies," in Williams and Elmore (eds.), Social Program Implementation, pp. 89 and 91. A more extended treatment of this case is found in Murphy's State Education Agencies and Discretionary Funds (Lexington, Massachusetts: Lexington Books, 1974).

77. Ibid., p. 94.

78. Karl Weick, "Educational Organizations as Loosely Coupled Systems," in Administrative Science Quarterly 21 (1976): 1-18.

79. Jeffrey Pressman, Federal Programs and City Politics: The Dynamics of the Aid Process in Oakland (Berkeley, California: University of California Press, 1975), pp. 14 and 143-4.

80. Jeffrey Pressman and Aaron Wildavsky, Implementation (Berkeley, California: University of California Press, 1973), passim.

81. Martha Derthick, New Towns in Town: Why a Federal Program Failed (Washington, D.C.: Urban Institute, 1972), pp. 97-8. Portions of this study are reprinted in Williams and Elmore, Social Program Implementation, pp. 219-39.

82. Mario Cuomo, Forest Hills Diary: The Crisis of Low-Income Housing (New York: Random House, 1974), passim.

83. Helen Ingram, "Policy Implementation through Bargaining: The Case of Federal Grants-in-Aid," in Public Policy 25 (4) (Fall 1977).

Implementation and Control

Gerald Zaltman, David Florio, and Linda Sikorski

Implementation is an essential component of the P/ICM. Early change-related activities such as planning are directed toward achieving implementation. Most of the remaining change-related activities, such as evaluation and control, are directed toward sustaining the implemented change by altering, if necessary, the way in which a change has been implemented. This chapter is concerned with implementation and control, stages 8 and 9 in the P/ICM schema. The focus of this chapter is on what occurs after the decision to adopt a change has been made. The central questions are: What can be done to put the change into effect with best results? What can be done to ensure continued effective implementation? Actually, these questions have been addressed frequently in earlier chapters, most noticably 5, 6, and 7. Careful need assessment and planning and the related problem-definition and solution-generation activities are crucial to the success of the implementation stage.

Zaltman and Duncan (1973, 1977) identify two basic stages in the adoption process. First is the initiation stage, which involves knowledge-awareness of a change, attitude formation, and a decision to adopt or reject. The second general stage is implementation, which is concerned with the process by which the organization integrates the change into its ongoing operation. Our concern here is primarily with the second stage.

The implementation stage involves an initial substage, itself called implementation, at which the organization implements the change on a trial basis to determine if it is practical. A second substage, called continued-sustained implementation, will occur if the trial is favorable.

During the trial substage, responsibilities are assigned and time schedules and deadlines are established and clearly commu-

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nicated. Communication among all affected parties is important in detecting and working through unanticipated consequences. It is usually desirable to institute a change on a trial basis, particularly if there is considerable concern about the change or even opposition to it. Individuals who are reluctant to see a change made permanent will often agree to a trial period if no commitment is made to continue the change. It is necessary, of course, to clearly define the duration of the trial and to realize that the results obtained during a trial period may not totally reflect what the experience would be if the change were permanent. Not all the benefits or difficulties will necessarily become evident in a trial situation. The trial experience enables members of an educational system to evaluate the pros and cons of a change. It also affords the change planner an opportunity to gain more legitimacy for the change or solution. Further it provides feedback that may serve as a basis for modifying the solution and the way it is put into operation. Full-scale operation may involve establishing new positions or altering existing roles to encompass new activities while eliminating other activities.

At the continued-sustained implementation stage, a solution becomes routinized. Dilemmas that individuals may have faced with respect to the change or solution tend to be resolved at this point. However, a full-scale adoption may not always occur. The timing of change may be poor. For example, teachers are less open to change at the end of a school year than at the beginning. Financial or human resources to fully implement the change may not be available. There may be no evidence after the trial that the solution is sufficiently beneficial. Unanticipated negative consequences may have occurred during the trial. These and many other reasons may result in a decision to discontinue a trial or prevent full-scale implementation.

In the following sections, we discuss conditions that affect the implementation of change, matters relating to control, and the process involved in continued-sustained implementation of change.

IMPLEMENTATION

Conditions affecting implementation include organizational characteristics, change-planner skills, and the nature of the change, as well as a series of factors described by the "A VICTORY" model of implementation discussed below.

ORGANIZATIONAL CHARACTERISTICS

The structure of the organization or system that has adopted a change have a strong impact on the implementation of the change (Zaltman et al 1973, Zaltman and Duncan 1977). The very structures that facilitate the initial predecision and decision stages make the implementation stage difficult. Similar structural characteristics that facilitate implementation make initiation difficult. This paradox was discussed in chapter 3 and need not be continued here. However, it is useful to discuss three characteristics of organizational structures that affect implementation. The first is complexity, which refers to the number of occupational specialties within the organization, the professionalism of people in those specialties, and the extent of differentiation of the task structure. Formalization refers to the degree of emphasis placed on following specific rules and procedures. Centralization refers to the locus of authority and decision making: at what level are decisions made and how many members of the organization participate in the decision-making process?

The importance of these characteristics can be illustrated by reference to a three-year study sponsored by the National Institute of Education. This study involved the testing of a special problem-solving mechanism using survey feedback to identify and clarify problems, generate solutions, and implement solutions. A unit school district with twenty schools was the test site. Problems could be identified at the school building level or at the district level. Responses to the problems could involve (1) teachers at the individual school level or on a district-wide level, (2) special-education teachers not primarily involved in any one school, (3) principals, (4) assistant superintendents, (5) the superintendent, (6) nonteaching building staff, or (7) any combination of people mentioned.

At the district level, the organization is complex. There are many different roles that could be affected by a given change. It thus became necessary to discuss with most of the people how an accepted change could be put into effect to be of maximum value to the user of change. Because of the large number of persons and perspectives, the implementation of change at the district level was a long process. This was later compensated for by temporarily making the school district less complex. An implementation team was established which consisted of two teacher representatives, principal representatives, a non-teaching-staff representative, a special educator assigned to a building for purposes of the study, and a member of the superintendent's staff. Thus, because complexity was a hindrance, a switching rule was developed which made the implementation situation less complex. That is, fewer roles and fewer people were charged with the task of putting a change into effect.

The school district lacked a formal structure that would facilitate the implementation of change. Thus, a provision was made to clearly identify ways a proposed solution to a problem could be implemented. The solution, if accepted, could then be put into effect in a relatively straightforward way. An implementation plan was thus ready at the time the adoption decision was made, instead of having to be developed afterward. Actually, the implementation plan gave decision makers a better sense of what the change or problem solution involved and so made it easier to reach a decision. The plan was prepared by teachers at the school building level and by teachers, principals, and sometimes staff from the superintendent's office. The implementation was in effect a formal procedure.

In general, a highly centralized structure facilitates implementation. Fewer people are involved in the decision about how the change is to be implemented. This does not necessarily mean that better implementation results from a highly centralized authority, but rather that it can proceed more quickly. For the most part, decisions were made in a highly centralized way: the school principal had final say in individual school matters, and the superintendent had final say as to whether and how district level changes were implemented.

CHANGE-PLANNER SKILLS

The change planner concerned with implementation should possess several skills. It would be rare to find anyone who has all of these skills, but the change planner should approximate them to some degree. First, the change planner should be able to negotiate and achieve conflict reduction. This is particularly important if, in the implementation process, one person or group receives fewer resources than another person or group seen as competitive. A department within a school, for example, may perceive another department as receiving preferential treatment in the number of faculty positions available.

The change planner must also be able to predict the effects of results of a particular action (or of not taking action). The vice-president for academic affairs of a large university in Boston, Massachusetts, correctly perceived a strong negative reaction among members of the school of education when he selected someone from outside the school (and outside the university) to direct a new education research center that was organizationally independent of the school. To reduce the feelings of alienation and threat experienced by members of the school of education, he influenced the new director to select his associate direct from among existing school-of-education staff, and to be liberal and quick in extending joint appointments to several members of the school of education. (It might be added that in this case there was a fairly large minority in the school of education who did favor the appointment of an outside person.)

Third, the change planner must be able to create enthusiasm and trust. Enthusiasm is particularly important to help compensate for the extra "start-up" costs often associated with something new. At the early stages of implementation, meetings may have to be more frequent. Unless people are enthusiastic, their attendance may drop off, the meetings may become less fruitful, and the implementation effort may be less effective. Care must be taken not to let unrealistic expectations develop about how rapidly benefits of the change will be realized. Enthusiasm will be dampened very quickly if substantial immediate benefits are expectaed but are not forthcoming. A change planner can often keep enthusiasm high in the absence of immediate benefits by communicating his or her own enthusiasm.

A fourth skill is the ability to organize and arrange people and resources effectively. The planner must know whom to delegate particular responsibilities to and what kind and amount of resources must be allocated to enable individuals to carry out their responsibilities. He must be sensitive to various personalities and know something about the interpersonal relations that exist among colleagues. For example, he should recognize that people who do not get along with each other in general should probably not be placed together in a small group to achieve some task. The planner must be able to identify leaders and others who are task-oriented and should assign important responsibilities to them. Thus diplomacy and political finesse are important traits.

A fifth and related ability is to provide access to important financial and nonfinancial resources. This involves knowing where and how resources can be obtained. Many school systems have individuals whose responsibility it is to monitor the availability of external resources, including state and federal as well as private foundation sources of money. This function also involves identifying experts and data sources. Thus, the planner involved in implementation must generally have a wide network of interpersonal contracts on professional matters.

It is important for change planners both within and outside the organization to be sensitive to different roles affecting the change process. In implementing change it is necessary to consider who the gatekeepers are. For example, school principals may be gatekeepers who relay information from superintendent to teachers. The information may consist of instructions for carrying out a new grade-reporting system or a new method for teacher and staff self-appraisal. In studying the role of gatekeepers in education, one of the authors found that the manner in which the principal of the school passed on the instructions was a critical factor in differentiating between schools that implemented a change easily and successfully and schools that experienced difficulty and limited or no success. Principals who opposed the self-evaluation process tended to relay the information less accurately and with fairly evident disapproval and thus were more likely to have problems with the new system. In contrast, principals who supported the new system were more accurate and enthusiastic and had greater success with it. Unfortuntely, in this case, the school principals were the only channel between the superintendent and teachers. Thus, the gatekeeper may be a key person in implementation and should be "won over" by the change planner, in this example, the superintendent.

It is also necessary to consider who the influencers are. The influencer is a person who helps shape the attitudes and/or behavior or users. The influencer need not be directly involved with the change, but may nevertheless affect its success. Special-education personnel may oppose a new reading program that a principal is implementing. Their opposition may dampen teacher enthusiasm and hence the effectiveness of the program. Teachers in this case are the users (although the students and even the principal can be users here as well). The users, then, may or may not be influencers and may or may not be gatekeepers. A teacher using a new reading program on a trial basis in another (pilot) school within the same district may be a user, a gatekeeper, and an influencer with respect to implementing the new program in another school or in the entire district. Note that in this example the decision maker is not the user, gatekeeper, or influencer, but rather the school principal or possibly the district superintendent.

In general, when implementing change in an organization, it is necessary to identify the key roles of influencer, gatekeeper, decision maker, and user. Furthermore, it should be realized that one person may fill more than one role. A fifth role has been suggested, namely the affectee or person who experiences the consequences of a change. For example, students will be affected by the change as well as teachers. Teachers at higher grade levels may also, with some time lag, be affected by techniques and programs used by teachers in lower grade levels. Parents of students are also affected less directly.

Finally, the change planner must have the ability to distinguish between those variables or factors which can be manipulated and those which cannot and must therefore be adapted to. This is discussed at length later in this chapter when we focus on the control of change. However, the issue of controllability is important at the implementation stage as well, since control is simply a continuation of implementation.

THE NATURE OF THE CHANGE

The nature of the change or innovation is an important variable in the initial and continued implementation process. As noted above, some aspects of change can be altered by the change planner, while relatively unalterable aspects must be adapted to. Some examples will illustrate this point. First, the more pervasive the innovation--the more it affects many people or groups within an organization--the more important it is for the change planner to continue to interact with a broad spectrum of people in the school system in order to be alert to and help prevent potential problems. This is based on the assumption that the larger the number of people affected by a change, particularly in different areas of the organization, the greater the likelihood that someone will have an unsatisfactory experience with the change.

The more complex a change, either in terms of the basic idea behind it or in terms of its actual operation, the more important it is to undertake educational activities both before and after it is implemented. The important point is that efforts to enhance understanding of the change should continue after implementation, perhaps even on a permanent basis. Thus, frequent workshops or seminars on new computer programs or other technology may be held. For example, periodic orientation programs and user training in library resource use are conducted by university libraries, particularly for disadvantaged persons who may be especially lacking in experience in using libraries and may perceive them as complex systems.

Divisibility is another important attribute of a change. This refers to the degree to which a change may be tried in a limited way. Thus, a university may try an evaluation-free method of conducting classes in only a limited number of courses. When there is considerable opposition or uncertainty about a change and the change is divisible, it is good practice to implement it in a limited way but in a context, such as a school or grade or course, where the chances of success are greatest. It will typically be easier to introduce a change on a system-wide basis after a limited but successful trial in one part of the system.

Reversibility refers to the degree to which the pre-implementation situation can be reinstituted if a change is discontinued. In this case of evaluation-free courses this could be (and in fact has been) done relatively easily. On the other hand, attempts to discontinue an organizational development program have sometimes created considerable conflict between proponents and opponents, a conflict not present before the implementation of the program. Of course, some changes are not amenable to trial in either a limited or a temporary way. Thus, trialability becomes another important dimension.

THE A VICTORY MODEL

A checklist of implementation considerations that are particularly useful at the initial implementation stage has been developed by staff of the National Institute of Mental Health (1973; see also Davis and Salasin 1974). Before presenting the checklist we shall give a brief description of the model behind it. The model attempts to identify factors affecting the fate of a given change after an adoption decision has been made.

The Model. The behavioral formula upon which A VICTORY is based is as follows:

$$B = E_s + T + S_e + \{(P + H_s) D \times C\} - I, \text{ where}$$

B is the desired behavioral change,
E_s is an individual's self-expectancy (values, life style, etc.)
T is the timing.
S_e is the stimulus conditions (environmental factors affecting the individual),
P is the pattern for behavior (information/skills needed to perform the desired response),
H_s is habit strength (the tendency to do certain things because of a previously learned association between those activities and pleasant consequences),
D is drive or motivation,
C is the capacity to perform the behavior, and
I is the inhibitors of the desired behavioral response.

A translation of the general behavioral model into the A VICTORY paradigm is described below:

B = A VICTORY, where
B = Behavior (the desired program change)
A = Ability (resources or capacity required to execute the desired change)
V = Values or self-expectancy
I = Information about the idea
C = prevailing Circumstances or stimulus conditions
T = Timing
O = Obligation (felt need or motivation)
R = Resistances or inhibitors to the change
Y = Yield or habit strength (felt rewards or benefits)
{Adapted from NIMH 1973: 27-28}

The model elements are by no means discrete, and a good deal of interaction among them may be expected. Advocates do believe, however, that all of the variables that may affect a change endeavor are subsumed within its parameters. They also feel that, although the model is intended to explain the behavior of an individual, it is equally applicable to groups of individuals, which are more often the target of educational and other social change programs.

The A VICTORY technique has been and is currently being employed in a variety of social-service settings including community mental health centers, hospitals, and community change programs (Davis and Salasin 1974). The authors are unaware, however, of any applications of the model in educational settings. We believe that it is a potentially powerful tool for effecting change in educational systems.

As a hypothetical example, the A VICTORY technique could be applied to the problem of improving the quality of college teaching (the target behavior change). One vehicle for this improvement might be a course on teaching and instructional techniques for doctoral candidates who plan to pursue careers as college or university professors. Data could be gathered on the effectiveness of such an approach by providing students who have completed the course with an opportunity to teach a college course (or at least a segment of one). For the purpose of comparison, other graduate students who did not receive the treatment (the course on college teaching) would also be provided with a comparable teaching experience.

Ability. The institution of a course on college teaching in a given graduate school would require several kinds of resources: (1) a faculty member (or members) with the requisite skills to teach the course, (2) funds to free his/her time to pursue this end or to hire an appropriate outside person, and (3) graduate students willing or able to participate.

Values. University faculty members and administrators should perceive the merit of the innovation, as teaching is a very important function of the present and future professor's role. Faculty review committees generally consider evidence of "good teaching" second only to "scholarship" in their promotion considerations. For similar reasons, graduate students should be receptive to the idea. The question remains, however, whether administrators and faculty members would view the innovation as important enough to warrant freeing the necessary resources in terms of time and money as opposed to giving only token resource support.

Information. If one or several graduate institutions were to offer the course and gather data on its effectiveness, it would be necessary to disseminate information and data to other potential users. Traditional avenues of diffusion employed by educators would be appropriate, such as the publication of articles in educational journals and the presentation of papers at meetings of professional organizations. Although it seems reasonable that these diffusion activities would reach a fairly large number of potential users, little is known about their impact on professional practice.

Circumstances. The environment or physical facilities of a university are certainly amenable to such an innovation. Classrooms, audiovisual aids, textbooks, and library resources are already available. Providing graduate students with an opportunity to teach may be a problem in some institutions. Other means of assessing program effectiveness may be devised, however.

Timing. It would probably be best to introduce the innovation during a period of relative stability for those who would be affected. Receptivity would likely diminish during periods of change or stress.

Obligation. Another factor would be the intrinsic motivation of relevant parties to offer the new course--whether or not they perceive the existence of a performance gap and, if so, the degree to which they feel the course would close the gap.

Resistances. An obvious source of resistance would be budgetary and/or faculty time constraints. Since resources are never unlimited, judgments would have to be made regarding the relative importance of the course on college teaching versus all other possibilities for expending the finite quantity of time and energy. External funding sources could be explored, however. Another source of resistance might be faculty sensitivity to the emphasis on "teacher accountability." If they perceive that their support of this innovation might be construed as tacit approval of a university or department policy on student or peer evaluation of teaching, opposition is likely.

Yield. The results of the studies comparing the "teaching success" of graduates who have completed the course with that of comparison groups would provide some evidence of the success of the innovation. If the research efforts are carefully designed and executed--if they are replicated in a variety of university settings--and if the results are generally favorable to the notion that "training" can improve college teaching "ability," then the promise of the innovation is enhanced.

The A VICTORY Checklist. For those who seek to develop a change plan that employs the A VICTORY model, the following (NIMH 1973:30) can provide further insight into the components of the model:

ABILITY

- Are the staff skills and knowledge appropriate to accommodate the desired change?
- Are fiscal and physical resources adequate for the change?

VALUES

- Is the change consonant with the social, religious, political, and ethnic values of the beneficiaries?
- Is the change consonant with the philosophies and policies of the program supporters?
- Is the change consonant with the personal and professional values of the staff?
- Is the top person in the organization in support of the desired change?
- Are the characteristics of the organization such as to render change likely?

INFORMATION

- Is information on the desired change clear?
- Does information about the idea bear close relevance to the improvement needed?
- Is the idea behind the desired change one that is "tryable," observable, of demonstrated advantage, etc.?

CIRCUMSTANCES

- Are conditions at this setting similar to those where the idea was demonstrated to be effective?
- Does the present situation seem to be conducive to successful adoption of this particular plan?

TIMING

- Is this a propitious time to implement this plan?
- Are other events going on or about to occur which could bear on the response to this change?

OBLIGATION

- Has the need for this change been ascertained through sound evaluation?

- Has the need for this change been compared with other needs in this program?

RESISTANCES

- Have all reasons for not adopting this change been considered?
- Has consideration been given to what may have to be abandoned if this plan is launched?
- Has consideration been given to all who would lose in this change?

YIELD

- Has the soundness of evidence about the benefits of this proposal been carefully assessed?
- Have possible indirect rewards for this change been examined?

CONTROL

What happens in a healthy, self-renewing organization after the change or innovation has been implemented? The proactive/interactive organization must be prepared to continually assess its performance not only in the light of its problem-solving objectives, but also in the light of new contingencies within and outside the educational system. Through collaboration among its members and between itself and its environmental forces (e.g., client groups, interested publics, governing bodies), the healthy organization continually reviews the impact of a specific change on various parties and how the impact compares with their expectations.

When the impact of a change is judged to be negative or insufficient, the exercise of control becomes necessary. Control refers to activities responsive to results of monitoring a specific change and activities responsive to results of a continual assessment of performance over time. Those activities involve the systematic manipulation of some variables, such as staff size, human-resource expertise, and so on, to maintain or achieve a particular level of performance in some part of the educational system. The variables that the change planner may adjust or manipulate may or may not be within the educational system. For example, when a school is the target educational system, teachers concerned about a problem area such as reading may attempt to have the district office hire an additional reading specialist or acquire more time of an existing specialist in the district. This is the adjustment of a variable outside the immediate system. Alternatively, a teacher within the school may obtain special training or, if he or she possesses that training, may be given more time to deal with reading problems.

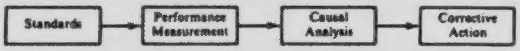
Control requires that the educational system (1) set forth standards for its objectives, (2) assess actual performance in the light of the standards set for objectives, (3) analyze the cause of any discrepancy between actual and intended performance, and (4) adjust performance to close any observed gaps. These four elements are shown in figure 8-1.

Figure 8-2 represents a plan-control process by which the change planner considers where it will be necessary to make adjustments in order to bring actual performance in line with intended performance. Assume for purposes of illustration that the performance of a curriculum innovation is judged to be unsatisfactory. This would be determined by evaluation research (discussed more fully in chapter 9). The educator should ask first whether the measures of performance used are accurate and measure the correct items. If not, he may find that he is trying to adjust for a performance gap that does not exist. If, on the other hand, he determines that the performance gap is indeed real, it becomes necessary to ask whether one or more of the other factors--implementation, plan, objectives, and so on--could be at fault.

IMPLEMENTATION

Of most concern in this chapter are the questions: Is it the implementation that is at fault? Are the strategies and tactics being used appropriately? Were the most important criteria for selecting strategies considered explicitly? Chapter 3 discussed these concerns at length and we shall return to some of them shortly.

FIGURE 8-1. Four Elements of a Control System
Source: Bell 1972. Used by permission.



What has not been previously discussed to any significant degree is the concept of causal analysis, which is a necessary foundation for implementing a change and undertaking corrective action. Causal analysis involves developing a picture of what factors influence what other factors. This serves as a guide to selecting factors to control in order to achieve a change in some other factor. In developing such a picture it is neccessary to separate those variables or factors that can be altered from those that cannot be altered by the change planner. These latter factors are those to which the change planner must adjust. Control variables must be identifiable, accessible, and, of course, manipulable. These three criteria can be defined as follows:

1. Identifiability: The feature or organizational variable is both observable and operational in light of resources, constraints, and other real-world considerations.

2. Accessibility: The variable can be addressed, seen, and approached by the significant organizational members involved in the control process. There are communication channels between the organizational members and those individuals associated with the variable (or channels could be built through the linking network).

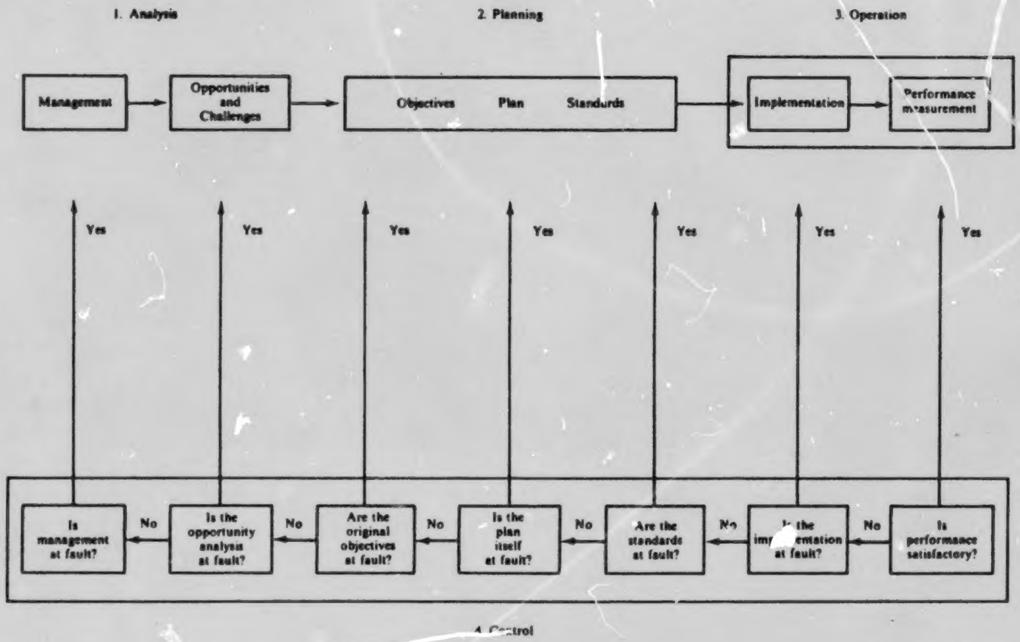
3. Manipulability: The variable is identifiable and accessible, and the organizational members have the resources and "leverages" to "put the variable to work." "The practitioner must weigh factors within his agency structure that may place restrictions on his capacity to manipulate the given variable." (Rothman 1974:554)

For example, the successful use of a curriculum innovation may depend upon such uncontrollable variables as student's present intellectual capacity and the degree of reinforcement received in the home.

Consider the case of the DUSO kit, which is intended to Develop Understanding in Self and Others among preschool and early-grade-school children. Controllable factors might be advance training for teachers in the use of the DUSO kit, the degree of preparation students receive prior to using the kit, and the nature of their debriefing at the end of sessions with the kit.

The association of independent variables (e.g., training), sometimes called impact or causal variables, with dependent variables (e.g., performance or results) is thus the essential task of the causal analysis phase of control. The change planner can then undertake the necessary corrective action. Such action might include group sessions for training teachers in the use of an innovation. In the case of DUSO, this would also cover the procedure for preparing students for the use of the kit.

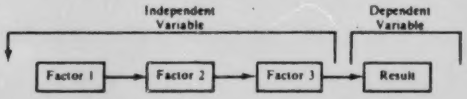
FIGURE 8-2. A Plan-Control Process


1. Analysis
2. Planning
3. Operation
Management
Opportunities and Challenges
Objectives
Plan
Standards
Implementation
Performance measurement
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Is management at fault?
No
Is the opportunity analysis at fault?
No
Are the original objectives at fault?
No
Is the plan itself at fault?
No
Are the standards at fault?
No
Is the implementation at fault?
No
Is performance satisfactory?
4. Control

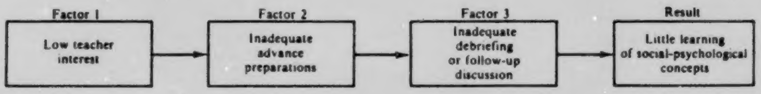
INFERENCE TREES: A TOOL FOR CAUSAL ANALYSIS

Developing inference trees is a useful process for change planners to use in connecting independent variables with dependent variables. Such efforts are designed graphically to visualize causal variables for a given outcome or performance gap and, as much as possible, to indicate their relationship to each other as well as to the dependent variable. Two basic types of inference trees are helpful. One involves longitudinal prediction, or the chain of events that must take place in order for the expected outcome to occur (Zaltman, Pinson, and Angelmar 1973). The other involves point-in-time analysis, which is descriptive of multiple variables impacting the results simultaneously.

The basic longitudinal inference tree is depicted below.

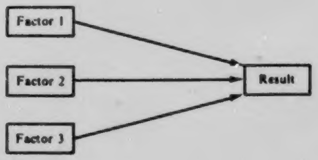

Independent Variable
Dependent Variable
Factor 1
Factor 2
Factor 3
Result

For the DUSO kit, Factor 1 may be the level of interest among students and/or teachers in the use of the kit. Factor 2 may be student (or teacher) preparation for the use of the kit. Factor 3 may be debriefing after the use of the kit. Thus, poor learning of basic psychological and sociological concepts (the result) could be shown as:

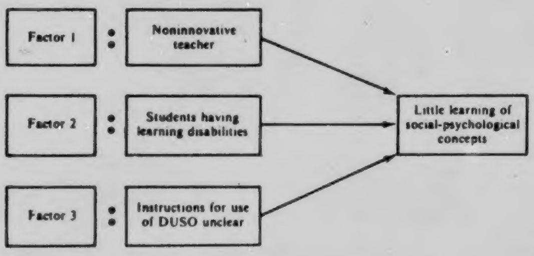

Factor 1
Low teacher interest
Factor 2
Inadequate advance preparations
Factor 3
Inadequate debriefing or follow-up discussion
Result
Little learning of social-psychological concepts

Low teacher interest and motivation could lead to careless preparation of students, which would prevent proper use of and involvement with the kit. Poor preparation could render the debriefing session useless because of an inadequate experience base derived from the kit. The reader may have a different structure of relationships as well as different factors in mind with reference to this example. This is precisely the reason for drawing inference trees--to clarify one's own thinking and to reexamine one's initial ideas about the reasons for success or failure.

The point-in-time inference tree helps clarify causal variables that are not directly related to one another. For example:

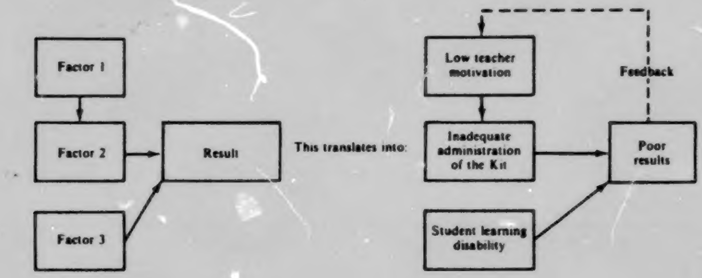

Factor 1
Factor 2
Factor 3
Result

Factor 1 could represent teacher innovativeness, factor 2 students' basic abilities, and factor 3 the clarity of the teacher guide that accompanies the kit. Thus, poor performance of students with the kit could be expressed as:


Factor 1
Noninnovative teacher
Factor 2
Students having learning disabilities
Factor 3
Instructions for use of DUSO unclear
Little learning of social-psychological concepts

In the short run, student learning disabilities (factor 2) are an uncontrollable factor. The reader may or may not find factors 1 and 3 controllable. In several actual instances involving the kit, these were controllable factors and variables.

There are several variations on the two basic types of causal models. One is a combination of both basic types. For example:



The reader can imagine the number of variations that could occur when the number of factors increases and when more than one result occurs.

Several considerations should be kept in mind when developing inference trees in causal analysis.

1. Is the causal chain comprehensive? Are all the relevant factors presented?

2. Have time considerations been taken into account? For example: Are variables operating simultaneously taken into account? Student learning disabilities and teacher motivation may exist at the same time, whereas the adequacy of kit administration follows teacher motivation. As indicated by the dotted feedback line, the poor results may reinforce and thereby lower teacher motivation still further. In this instance a given state of results may temporarily precede and bring into existence a change in teacher motivation.

3. Are there unrelated independent phenomena (variables) occurring at different points in time?

4. Are there times when variables interact and other times when they do not? Does the teacher motivation interact with kit administration only when the teacher perceives the principal or school psychologist as being indifferent to the use of the kit? Will strong interest expressed by the principal overcome low teacher motivation?

5. Are there variables that are essential for the obtained result to have taken place? Adequacy of administration of the kit may be essential no matter what teacher motivation and student abilities are.

6. Are there variables that are "sufficient" for a particular result but not essential? It is possible that, even in the absence of student disabilities, low teacher motivation to innovate with the use of the kit would still ultimately produce poor results. On the other hand, the same results might occur even with highly motivated teachers if student were seriously handicapped.

7. Are there spin-offs or latent consequences of variable sets that can impact the results at a later time or even mitigate the resulting events?

8. Which variables are most easily manipulated in the event results produce serious performance gaps? Student learning disabilities may not be manipulable in the short run. Teacher motivation might be manipulated by offering incentives for effective use of the kit, assuming that the disabilities of the students alone were not sufficient to produce poor results. Alternatively, if proper administration of the kit is essential and if teachers cannot be motivated to use it effectively, then administration could be controlled by having a specialist (perhaps a psychologist employed by the district) administer the kit. This would interrupt the impact of teacher motivation on the results obtained in using the DUSO kit.

Once again, the use of causal analysis - that is, thinking in terms of "what influences what" - helps the change planner develop more explicitly the set of relevant variables or factors, how they are relevant and related to one another and which factors can and cannot be changed in the short run.

The implementation process may falter because inadequate attention was devoted to the various considerations that successful programs must satisfy and the implications of each consideration for the choice of basic strategies. The change planner can exercise control in the ongoing implementation process by manipulating (1) the perceived need for change; (2) the degree of commitment to change among people in the educational system; (3) the system's capacity to change; (4) the time involved in the change process; (5) awareness of the presence of a change program; (6) the dynamics of particular decision stages; (7) the magnitude of the change; (8) the systems and the way members of educational systems are classified and responded to; (9) the sources and levels of resistance; (10) the unintended/unanticipated/dysfunctional consequences of change; and (11) the nature of the change. These considerations, discussed briefly below, are not exhaustive. Rather, they are simply representative of some of the most important things a change planner may control to create educational change. These must be considered in all aspects of the control process but particularly at the implementation stage. Many of these will be familiar to the reader as a result of reading chapters 2, 5, and 6. (A more detailed discussion of these potential control factors can be found in Gross et al. 1971 and Zaltman and Duncan 1977.)

Perceived Need for Change. Making an educational innovation available does not guarantee that it will be used. The proposed change must be linked clearly to a felt need for change among educators, and it is important that they believe that the need can be met without undue social, psychological, or financial cost.

When the client group does not perceive a need or experience a performance gap, power strategies may be the most appropriate approach to control, since there will be no particular motivation for voluntary change. While initiating change through a power approach--for example, through instructions from the superintendent for all teachers and other staff to participate in an organizational development program--it may be desirable to be pursuing manipulative and rational strategies to identify the need for change so that change may be continued voluntarily later on.

Degree of Commitment. Having a felt need is important in the change process. Equally important, however, is a commitment or strong intent to undertake remedial action. In general, the lower the educator's motivation to solve a problem or satisfy a need, the easier it must be made for him to use an innovation not yet adopted. The lower the degree of commitment, the greater the need to exercise control through power strategies or perhaps manipulative strategies to heighten effective commitment by controlling the perception of a situation. A rational strategy would be less likely to affect commitment. One effective control technique for increasing and maintaining commitment is to link advocated practices to interpersonal relationships, thus making ecucational innovations a vested part of the educator's social setting. This is especially important for maintaining commitment.

Capacity to Change. The change planner often has to exercise control by enlarging the capacity of the system to undertake change. This capacity is a function of at least three factors. One factor is a general openness to change. Are administrators and other educators willing to experiment and take risk? A second factor is knowledge or awareness of innovations. Frequently when an individual (or a system) is open to change, he will generally be aware of innovations relevant to him. A third factor is available resources, both human and financial, for identifying, acquiring, or building and implementing change.

When all three factors are present in the desirable degrees, a rational strategy is generally all that is needed to induce (partially control) at least the trial of an innovation.

Time Requirements. In many instances where groups or individuals are ready to implement change, a rational change strategy may produce change relatively quickly. Thus, those persons for whom innovation-related information is already relevant or useful but simply not available could change their practices rapidly if the change planner brought the information to their attention. Such rational strategies that help inform educators about the nature and severity of a problem and bring potential solutions to the attention of adopters are appropriate when the need for change is not urgent.

The use of a power strategy may cause a backlash of resentment. However, when the need for change is urgent and a commitment to change is not present, a power strategy is indicated.

Educator Awareness of a Change Program. Rational strategies do not work simply by virtue of their having made an innovation available to educators. Consumers must be aware of the availability of solutions to problems. Also, they must clearly understand the behavior required by a change or innovation, or there may be resistance at the trial or adoption stage. Ambiguity is often due to inadequate efforts by the change planner to clearly communicate the nature of the change. Rational strategies are important for creating awareness of an innovation and informing people of the most appropriate way to obtain the innovation and related information concerning the effective use of the innovation. Training system members to use and participate in the linking network increases their ability to initiate and implement change in a rational way.

Stages in the Change Process. Social and individual change has been described by many people as an unfolding sequence of stages. Chapters 3, 5, and 6 discussed this in some detail. Although many different sequences of stages have been offered, there is general agreement that different change strategies are differentially relevant for particular stages. There is also agreement that the early stages usually require problem-recognition efforts, while later stages require solution-generation and implementation efforts. Rational strategies are the most appropriate means of control at the early stages for creating awareness of an innovation and, together with manipulative strategies, for identifying a need or problem that the innovation is supposed to address. Manipulative strategies become increasingly important control techniques at the evaluation and trial stages of adoption for structuring in favorable ways the interpretation of information and experience. If resistance occurs, then a power strategy may become desirable for moving the client into the adoption stage.

Magnitude of the Change. The larger or more significant the advocated change, the greater the inducement to change needs to be--that is, the stronger the control effort necessary. The change planner needs more power over the variables affecting the target system and must generally undertake all kinds of strategies.

It is useful to distinguish between the magnitude of the initial change and the magnitude of the continued change. A new authority structure may require considerable psychological adjustment at first but little additional effort after the initial period of implementation. However, some changes require much effort over a long period. An example is integration in the Boston school system, which required that police be more or less permanently assigned within school buildings.

Segmentation of the Educational System. Educational systems often differ from one another in their needs and even in the way the same needs are best satisfied. Accordingly, it is often desirable to cluster consumers into meaningful groups and to distinguish between different groups. One study (Kasulis 1975) reports that different kinds of information about curriculum innovations should be presented to teachers who differ in the way which they use information. This suggests a manipulative strategy. Similarly, the change planner should consider whether the same information about organizational structure innovations should be presented in the same way to teachers, administrators, and other educational staff. In one project involving an organizational development innovation, it was learned that teachers and principals had different concerns and information needs and hence had to be approached differently. For example, teachers wanted to increase their voice in decisions and were concerned about whether or not the OD project would allow for this. Special emphasis was placed on this feature of the project by the persons introducing the project. Principals, on the other hand, were concerned that they not lose any control or authority. Considerable control effort was necessary during the early phases of the project to explain how the project could in fact increase principal control even with greater participation of teachers in particular decisions (Duncan, Zaltman and Cooke 1975).

Anticipation of Sources and Levels of Resistance. Resistance to change may be found in the form of cultural barriers, social barriers, and psychological barriers. These three general sources of resistance are highly interrelated, as was indicated in chapter 2. The change planner must anticipate both the source and level of resistance and must develop contingency plans, should resistance occur. More important, by anticipating resistance, the change planner can develop and implement strategies to avoid or minimize undesirable conflict and resistance. Both rational and manipulative strategies are appropriate control techniques in this regard (Watson 1973). For example, the foot-in-the-door technique appears to be an effective manipulative approach with regard to curriculum innovations. A comparison of innovative and noninnovative elementary schools in three Chicago-area school districts showed that principals who had their teachers try curriculum innovation on a limited, clearly defined trial basis were much more successful in introducing enduring change than were principals who tended to require or encourange immediate, full-scale change. In the latter case, the changes were often perceived as being imposed and as very disruptive, while in the former case the changes were perceived as more voluntary and as less threatening and less disruptive. The use of temporary systems can aid this small-scale foot-in-the-door strategy.

Unintended/Unanticipated/Dysfunctional Consequences. Planned change may yield intended and unintended consequences. The unintended consequences may or may not have been anticipated and may or may not be dysfunctional from the educator's standpoint. Many change programs fail or achieve less than full impact because unfortunate unintended effects occurred that were not anticipated. Examples of such effects or consequences are confusion about the change (which leads to selective filtering out of information associated with the change) and mistaken assumptions that the change is more or less advantageous than it actually is. This stresses the importance of rational strategies to enhance educator information or knowledge. On the other hand, when dysfunctional consequences occur, a power-strategy mode of control may be necessary. In one OD program, teachers decided to convert into a teacher lounge a room used informally by the secretarial staff as a luncheon area. When the secretaries protested vigorously, the high school principal had to reverse unilaterally the teacher group decision.

Nature of the Innovation. One of the most important considerations is whether to control or manipulate the innovation or change itself to improve acceptance and impact. Several manipulations can be inferred from a discussion of innovation attributes by Lin and Zaltman (1971). When encountering resistance to or low effectiveness of the change, the change planner can attempt to (1) implement the change incrementally in a step-by-step process; (2) make it easy to return to prechange conditions, thereby reducing the adopter's perceived risk of a wrong decision; (3) decrease the real or apparent complexity of the change in terms of its use as well as its understandability; (4) lessen the impact of the change on valued interpersonal relationships; (5) improve the unique advantage of the change and add others; (6) decrease the financial or other costs to increase the cost/benefit ratio; (7) make the change available on a trial basis; (8) co-opt users or potential users in the process of adapting the change to the unique situation of the users; (9) stimulate word-of-mouth communication about the change; (10) facilitate actual use of the change; (11) clarify what the change is and what id does; and (12) make the change more compatible with the organizational structure of the school and the values of its members.

STANDARDS

Whether or not implementation is the source of difficulty, it is desirable also to ask if the standards are at fault. Standards are the levels of performance objectives agreed upon as necessary for successful problem solving or accomplishment of the change intentions.

Standards can be related to both process and product outcome. Process outcomes are related to the intended changes made in the educational system, and product outcomes are the result of those changes in the system. In the case of schools, for example, an innovative student performance evaluation system may have a process standard of 70 percent of the faculty operating with the new system after the first year of its availability in the district and 100 percent after the second year. The product standard would be the improvement in student learning made possible by more precise measurements of student academic strengths and weaknesses.

As noted earlier in the book, successful change efforts act as pathfinders and stimuli for further change and self-renewal efforts. Therefore, it is important to set the standards at a level that has reasonable chance of achievement. It is also important not to set unreasonable objectives that cause dysfunctional behavior among organizational members. For example, a performance contracting experiment used such extreme rewards as portable radios and television sets for students who met or exceeded performance standards on achievement tests. On the other hand, there is some evidence that high expectations can induce strong achievement efforts. If motivation is to come from successful efforts to achieve a goal, the goal must be placed low enough so that there is a reasonable chance of success and high enough so that achievement requires a significant effort and results in a sense of accomplishment. It is essential that the performers in the organization perceive the standards as attainable. In setting standards for performance under an innovative program, it is often desirable to place the standard within some "range of tolerance." In the example of the performance review process, if only 60 percent of the faculty of a school put the new system into operation, a 10 percent plus or minus range of tolerance would allow the organization to experience a relative degree of success and retain certain dissonance so that motivation to reach the higher standard is improved.

In setting standards for control it is essential to choose standards related to features of the organization that are identifiable, accessible, and manipulable. These features were defined earlier and include the available organizational resources, current or recently changed programs, organizational structural characteristics, costs, abilities and so forth.

The identification of such features is aided in the resource/constraint stage of the P/ICM. Associating standards with manipulable variables also aids in the testing and trial stage of the P/ICM. In short, the planning process involves the reality or feasibility testing of intended change and the problem-solving objectives and standards that the innovation addresses. Unreasonable standrds simply add to the frustrations and feelings of impotence among system members vis-a-vis their environment. For example, a public school would be unreasonable in applying certain standards of student achievement prior to entry. Neighborhood public schools have little choice in selecting student clients. In fact, political constraints may even prevent student-selection choices for within-school programs. Constraints on financial resources may preclude the full implementation (process standards) of innovation. Product standards must be reasonable in light of limitations on the implementation of change. On a broader scale, constraints on the measurability of standards have caused severe problems in the implementation of state-wide accountability plans for public school systems. Public expectations for associating student learning on cognitive tests with teacher performance are not reasonable, given the current state of the art of educational evaluation.

THE PLAN

After considering whether standards need adjustment, the change planner must next ask whether the general plan itself needs adjustment. The several premises and other considerations discussed at length in chapters 5 and 6 should be reconsidered in the light of the actual performance of the change, the standards used, and its implementation. The following questions are among those which should be asked about the plan.

1. Is the plan sufficiently comprehensive--that is, does it take all necessary factors into account?
2. Is the plan sufficiently detailed? Is there too much or too little detail?
3. Does the plan distinguish between variables that could be easily manipulated and those that could not?

4. Is the plan based on sound information? Are major assumptions of questionable validity made? Does the plan contradict the major premises in chapters 5 and 6?

5 Does the plan take into account the various conditions in which intervention would be most effective? Is the timing of activities carefully considered?

6. Does the plan consider the various criteria for selecting particular strategies and objectives? Is the information that is available about the problem situation clear enough to determine which strategies and tactics are most important?

7. Does the plan conform to the objectives set? Does the process of planning unwittingly involve an alteration of the original objectives?

8. Does the plan require resources, both financial and non-financial, not available to the change planner?

9. Does the plan involve excessive "political" compromise at the expense of effectiveness?

10. Does the plan contain both short-run and long-run considerations?

If any of these questions cannot be answered satisfactorily, it is generally indicated that the element of planning must be addressed. If most or many of the questions are answered unsatisfactorily, the plan may have to be totally revised or the entire planning process may need to be reenacted.

OBJECTIVES

After the plan is reviewed, the objectives of the change must be studied for possible problems and appropriate remedial activity. "Objectives are the specific endpoints for the programs which are to bring realization of goals" (Binne 1974:29). There are several questions that the change planner can ask to help diagnose problems relating to objectives.

1. Are the objectives too broadly stated to provide guidelines for planners, implementers, and evaluators?

2. Are there sub-objectives that identify "points of impact and what is to be accomplished at each point"? (Rothman 1974:29).

3. Are the objectives realistic in the light of available resources?

4. Are the objectives realistic in terms of legal, social and other constraints?

5. Are there hidden agendas in the objectives? That is, are there unstated objectives that are as important as, or more important than, the stated formal objectives? To what extent are the hidden objectives structuring the formal objectives and thus altering the stated objectives in unrealistic ways? If hidden agendas predominate, should there even be an evaluation of the formal agendas?

6. Are the objectives consistent with the belief and value system of those persons or groups whose thinking and/or behavior is to be altered by the change?

7. Are there too many objectives? Too few?

8. Are different objectives in conflict and possibly preventing the successful implementation of any of the respective objectives?

9. Is there a guide as to which objectives have highest priority and should be implemented first?

10. Is there a distinction between long-run and short-run objectives? If so, does the evaluation reflect this distinction?

After considering the adequacy of objectives, it may be necessary to reexamine the initial need assessment or opportunity analysis for possible problems. This topic has been treated extensively in chapter 7 and will not be developed here.

MANAGEMENT

Many programs fail as a result of wrong assumptions made by the managers of change. When this is diagnosed, the change planner must exercise control by correcting such assumptions and modifying the change process accordingly. The five most common and serious misassumptions are discussed below.

Rationalistic Bias

This problem is characterized by the belief that individuals are guided by reason and are rational according to conventional criteria. The manager or change planner assumes that all he needs to do to create change is to present information and knowledge regarding change to the intended educators. The tenuous assumption here is that when rational individuals are presented with the rationale for a change, they will accept it. Ignored is the fact that what educators consider rational for themselves is not necessarily what the change planner believes is rational for them. Thus, a change planner may inappropriately perceive his task as less complex than it actually is.

Poorly Defined Goals

Change attempts are often characterized by poorly defined goals. Educational goals or objectives are frequently stated only in diffuse and ambiguous ways. Is the intention of the change planner to change awareness? Knowledge? Attitudes? Behavior? All of these? In the short or long run? Is the intended change instrumental--that is, is it a means of achieving another goal? Or is it ultimate in that no further goals are sought? A dysfunctional consequence of poorly defined goals is that they are likely to create ambiguity, uncertainty, and anxiety for those persons who are going to be affected by the change. Ambiguity among educators about the use of information may create frustration or even tension which in turn could lead to avoidance of that information. Similarly, ambiguity can lead to the wrong use of information. If goals are poorly defined, the change program cannot be evaluated in terms of its effectiveness in accomplishing those goals. The change planner in education should have an explicit goal statement, like that discussed in chapter 6, addressing issues such as what changes(s) is expected of what groups(s) within what period of time. Without explicit statements of this nature, evaluation is difficult, and therefore appropriate remedial or control activities to improve the performance of the innovation cannot be readily designed.

Poorly Defined Problems

Problem definition is an intricate and highly partisan task. Too often symptoms are mistaken for causes of problems, thus resulting in the misdirection of remedial efforts, in effective use of resources, and increases in levels of frustration experienced by all parties involved in the change. For example, at one level of analysis, deficient reading may be diagnosed as the problem. At another, more specific level of analysis, poor reading is a symptom having its own unique causes, such as the absence of reinforcement at home of what is being taught in school. It seems more fruitful for the change planner to take the latter approach and determine what home and school factors are responsible for poor reading, their order of magnitude, and which student groups are involved. The subjective viewpoint of a single change planner highlights the need for multiple inputs of problem percepts. This is achieved by the team approach of the P/ICM.

Overemphasis on Individuals

Another major difficulty in creating successful educational change is the common assumption that individuals behave in a vacuum and are not influenced by those around them. Change programs geared to changing the attitudes and/or behaviors of the individual student, teacher or administrator often forget that the individual's behavior is affected quite dramatically by the interpersonal environment. If a teacher is asked to change behavior and is not supported or reinforced by other teachers and administrators, the behavioral change is unlikely to occur or to be maintained if it does occur. Thus, control efforts that neglect the social and physical context of the situation in which change takes place are missing some of the important causes of behavior.

Technocratic Bias

Technocratic bias is the overemphasis on development of a change program without an accompanying plan for implementation. There are many examples of educational innovations in which very substantial expenditures were made in product development and testing but very small financial and other resources were allocated to the preparation of a plan for implementing the product or service. Many illustrations of this are provided by Turnbull et al.(1974). For example, some developers of simulation games, individually guided instruction, and other innovations have made exhaustive efforts to develop products and services, but dissemination of them was very restricted because of inadequate marketing or implementation plans. A major reason why school desegregation is proceeding slowly is that court ruling and legislative action do not reflect consideration of how to implement that objective.

AN EDUCATIONAL ORGANIZATION INFORMATION SYSTEM

A major assumption of figure 8-2 and the discussion of it is that information is available to enable the change planner to determine where changes are necessary in the various analysis, planning, and operations stages. Information is the most critical element of the control process. The systematic flow of information is vital to the guidance of the educational system. Chapter 9 discusses at length the research process of evaluation research, which focuses primarily on the task of providing information about the impact of a change. However, it will be useful here to discuss the notion of a general organization information system (OIS).

A good organization information system will be one that not only facilitates control and evaluation of specific changes, but also alerts the organization to the important changes in its environment, as well as within its own boundaries, that may represent new problems and new opportunities. Thus, an effective OIS in an educational setting should provide the five types of reliable feedback mentioned in chapter 6: (1) content feedback; (2) input feedback, or data assessing alternative potential solutions to the problems caused by a change; (3) process feedback, or information about how the change is occurring; (4) product feedback, or information about the success of the change in satisfying its intended objectives; and (5) environmental feedback, or information about developments outside the immediate change setting that could affect the change process.

List 8-1 presents the basic sources of information that can provide the necessary feedback data for control within and external to an educational setting. The perspective is that of a district-level educational system. In order to make effective use of data from these sources for control purposes, the following seven activities (adapted from Cox and Enis 1972:19) must be performed:

1. Assembly: the search for, and gathering of, educational data from sources such as those in list 8-1
2. Processing: the editing, tabulating, and summarizing of data
3. Analysis: statement of the program implications of the data

LIST 8-1. Sources of Educational Information for Use in an OIS

Sources Within the District
1. The District as a System
   - Operations
     - Kindergarten, elementary schools
     - Junior and senior high schools
     - Vocational training institutions, etc.
   - Services
     - Special education, diagnostic testing
     - Vocational guidance, organizational development experts, etc.
2. Other operations
   - Superintendent, business manager, associate superintendents, school board
3. Other Service Groups
   - Teacher association (unions), parent-teacher groups, maintenance, etc.
4. Intrasystem Committees

Sources External to the District
1. Consultants
2. Constituents
3. Government Agencies
   - Federal
   - State
   - Local
4. Published Sources
   - news media
   - association newsletters
   - scholarly journals
   - books
5. Syndicated Services
   - ERIC
   - NTIS
6. Nonprofit Organizations
   - foundations
   - citizen groups
   - professional societies

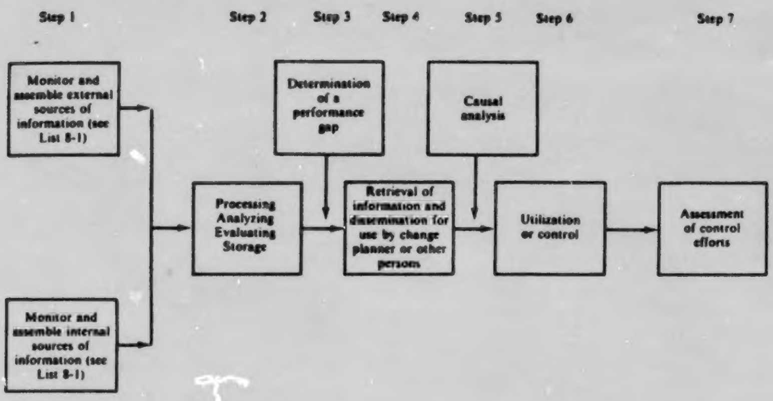
4. Evaluation: statement of the amount of faith or confidence that can be placed in the accuracy of the data
5. Storage and retrieval: the indexing and filing of data

6. Dissemination: routing useful information to the proper decision maker
7. Use: converting the implications into actions

Figure 8-3 presents a simplified and idealized or prescriptive organization information system for the educational change planner. The change planner would monitor both internal and external sources of information relevant to an initiated or contemplated change. The assembled information would then be processed, analyzed, evaluated, and stored. When a performance gap is identified--that is, when measures of performance fall below desired standards (see figure 8-1)--appropriate information is retrieved by the change planner for his own use, or it is disseminated to another relevant person. The information user should undertake a casual analysis of the situation and use the data in a manner suggested by the casual analysis. Use of the data is a control activity. The consequences of the control effort should then be assessed in the light of existing information from both internal and external sources.

The following example of an organization information system is a synthesis of the experiences of two small universities that attempted to change their public image. One school had been established as a two-year college and had recently converted to a four-year college. The other school had also been a two-year college but had changed to a four-year program several years earlier. Collectively, the two schools performed all the functions in figure 8-3, although individually they did not. Thus, the example will be presented as if a single school was involved.

FIGURE 8-3. An Idealized Organization Information System


Step 1
Step 2
Step 3
Step 4
Step 5
Step 6
Step 7
Monitor and assemble external sources of information (see List 8-1)
Determination of a performance gap
Causal analysis
Processing Analyzing Evaluating Storage
Retrieval of information and dissemination for use by change planner or other persons
Utilization or control
Assessment of control efforts
Monitor and assemble internal sources of information (see List 8-1)

The particular problem of concern to this college was that it was being perceived as a local school serving local community needs and very limited in its course offerings, although in fact the course offerings were better than average for a college of its size. The school was very concerned with how to attract students from a broad geographical base. Data concerning this problem was obtained from both internal and external sources. Internal sources included records of applicants and a yearly survey of how incoming students perceived the school. A record was kept of the community and state of residence of all applications received, regardless of their ultimate disposition. This information was assembled each summer. These data covering a four-year period were prepared for a special meeting of the college board of trustees (processing). There had been no change over a four-year period in the (very low) number of proportion of applicants from outside the immediate geographical area of the college (analysis). The data were considered by the school administration to be a good indicator of the geographical range of appeal of the college (evaluation). The college president, upon the advice of his assistant for planning and development, decided to gather external data consisting partly of a survey of a random sample of high school teachers serving as advisors to college-bound seniors. The sample was drawn from a six-state area surrounding the college's location. These data, describing teacher/advisor knowledge and opinions about the college, were also processed, analyzed, evaluated, and in effect stored pending the trustees' meeting. The college administrators indeed felt there was a serious gap between the information about the college that nonlocal high school students and teachers actually had and the information the college felt they should have. This determination of a gap was presented to the trustees (retrieval and dissemination to relevant persons). These data, along with other information from internal and external sources, were analyzed at length by college administrators and trustees (casual analysis and use).

SUMMARY

This chapter discussed implementation and control. Implementation is generally the process by which the organization integrates change into its ongoing operations, and control is the means by which it sustains the implemented change. Organizational characteristics, change-planner skills, and the nature of the change are all conditions that affect implementation. The A VICTORY model presented a comprehensive view of variables that may affect a given change. Control involves the systematic manipulation of some variables, such as staff size, human resource expertise, and so on, to maintain or achieve a particular level of performance in some part of the educational system. A general organization information system should provide five types of reliable feedback important to control of change and identification of new problems and opportunities.

Planning for Program Implementation-- A Process Guide

A. L. Brokes and Charles L. Jenks

TASK E: DEVELOP IMPLEMENTATION PLAN

Task E is the heart of this unit. It presents the various tasks which a planning group should consider as they prepare to implement a new program or project. Your group will be making decisions regarding organization and use of the program design and school resources. While each of you has probably thought about many of the issues of implementation planning during program design, the issues will now have to be considered in detail in order that (1) the program has a good chance of success and (2) potential problems can be anticipated and taken into account.

As the group proceeds through the subtasks associated with implementaton planning, the issues considered, decisions made, and specific plans agreed upon should be recorded so that a document will result that contains not only previous work (i.e., a problem definition, statement of objectives, a program design) but also provides a "blueprint" for action. Task E consists of twelve planning subtasks which the group should consider.

SUBTASK 1: WRITE IMPLEMENTATION PLANNING MISSION STATEMENT

The primary purpose of writing the mission statement is to achieve a common understanding between implementation planners of the job confronting them. When you have completed this subtask such a statement should have been produced.

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Definition

The mission statement is a relatively brief description of the job to be accomplished by implementation planners. It should specify:

1. The name of the instructional program or projects for which implementation planning is to be conducted and where in the organizational structure of the district or school the program will fit.
2. The date for actual program initiation.
3. The location, grade levels, classes, number of students, etc. for the program that is to be implemented.
4. Any major restrictions or requirements that might impinge on program implementation, such as district guidelines, the instructional program design itself, existing resources, or funding limitations.

Procedures

The mission statement is derived from the program to be implemented. Generally the first step taken is to review the program design for specific details that will aid in writing the mission statement. It is possible to develop a program design simultaneously while dealing with implementaton planning issues, and certainly a well-designed instructional program may have already considered several implementation issues. However, it is strongly recommended that the nature of the desired program to be implemented be thought through and described prior to detailed planning for its implementation.

Assuming that the program design is available and has been reviewed, the implementation planning group is ready to write the mission statement by describing briefly what it is they wish to accomplish. For example:

> "to prepare an implementation plan for the installation of the selected career education program for the 1975-76 school year. The program will be introduced on a pilot basis for approximately 120 tenth-, eleventh-, and twelfth-grade students at Futures High School. The program will be a total alternative for the selected students and will operate

> in accordance with guidelines relative to district-policy (e.g., teacher-student ratio, per-pupil expenditure, evaluation requirements, etc.) Students selected will be from a pool of volunteers. The program will be administered by the Futures High School principal."

Note that the actual scope of the program to be implemented requires careful consideration. For example, the number of students that can be adequately handled during the first year of a program, the amount and kind of learning resources available, etc., will help determine the scope of the program. For complex programs, school staffs need to consider whether they wish to implement the entire program with a few students at first and gradually increase the number, or implement only a few components of the program for a larger number of students and gradually move toward the total program.

In summary, the mission statement serves as an objective for implementation planners and an introduction to the implementation plan they will develop.

Note: Completion of the next eleven tasks is considered minimal for implementation of most instructional programs. They will vary widely in importance depending on the size and complexity of the program under consideration. They are closely interrelated and in the planning of small programs may be considered simultaneously. A careful analysis of program requirements according to subtasks 2 through 12 should produce a list of activities which should be performed if the implementation of the program is to be successful.

It may be helpful, though not essential, to consider the costs associated with each implementation task as it is generated. Determining implementation costs will be dealt with further in subtask 9.

A difficulty in generating tasks which led to the achievement of a mission statement lies in distinguishing tasks from subtasks. Subtasks must be accomplished before a task can be finished. What may be a necessary task in one implementation plan may be a subtask in another.

Although there appears to be no simple and immediate way to determine the difference between tasks and subtasks for a given implementation plan, the following considerations may be helpful:

1. What basically must be done before each part of the program implementation plan can be completed?

2. Can any of the initially generated tasks be logically subsumed under another task?

3. Can the goals and/or objectives of the educational program be reached only by the listed tasks?

Try to avoid getting bogged down in writing all the necessary subtasks for each task as it is generated before all the major tasks have been spelled out. It may be helpful first to write what initially appears to be a task and list any immediate ideas about relevant subtasks beneath it. After all the tasks initially agreed upon have been listed, the reconsideration of tasks and generation of additional subtasks can proceed.

SUBTASK 2: DETERMINE PERSONNEL REQUIREMENTS, INCLUDING PRESERVICE AND INSERVICE TRAINING NEEDS

This task involves determining the various skills required to implement the program, assessing the available staff's capability to provide the required skills, and identifying additional staffing needs, as well as staff training programs necessary to meet these requirements.

Task Analysis

Staffing requirements may be determined through a careful analysis of the program design. This analysis should focus on the following questions with regard to each task:

1. What has to be done?

2. What professional, technical, and human relation skills are required?

3. How much time will it take?

4. What types of supporting personnel (administrative, clerical, consultant) are required?

After each task has been analyzed in this manner, a master list of personnel required for the program can be compiled. This analysis will also provide sufficient information on the qualifications required for each position so that preliminary job descriptions and budget estimates can be made. Final job descriptions and budget figures will be determined in subtasks 5 and 9, respectively.

For example, you may determine from your analysis of the program design that skills required include counseling, teaching, writing, and community relations. Whatever the identified skills, you can then estimate the number of persons who will be needed. Further, if the planning group leader, for whatever reasons, will be unable to serve as program or project director, this position needs to be considered as well.

In some programs, staff development personnel will be hired as consultants rather than permanent staff members. Consultant time will decrease as the program progresses.

Hiring an evaluation consultant should be considered at this point. The worth of the program can be neither proved nor improved unless effective evaluation is an integral part of it. However, in large projects especially, even before outside consultant services are considered, one person in the planning group should be responsible for evaluation. This person can begin to anticipate the form that program evaluation must take and can assist the director by performing a monitoring function during all phases of the program. Outside consultation on evaluation, if required, should be contracted as early in the process as the budget permits. The earlier in the process this expertise is available, the more effective and useful the evaluation will become to the total program.

If the analysis of personnel requirements has been done with care, the personnel requirements list will rarely yield full-time equivalents (FTE) in terms of integral numbers. For example, the program may require 1.0 FTE librarian, 0.2 FTE accountant, 2.6 FTE secretaries, 6.5 FTE reading aides, etc. Since personnel expenses are generally far greater than all other program expenses combined, no more personnel than are actually required should be hired. High quality part-time services may be obtained either through special contracts or from the growing number of qualified persons who desire part-time, rather than full-time, employment. It may also be possible to share personnel with other programs operating in the school system.

Preservice and Inservice Training Needs

This unit assumes that the director will manage the program in a participative rather than an autocratic manner. The director becomes, in effect, the chief inservice trainer. From the beginning to the end of the program, the director should strive to teach by example the principles of participative management, mutual respect, trust and honesty, effective problem solving and decision making, and effective interpersonal and intergroup relations. The entire program may be considered an inservice training experience whereby staff members grow personally and professionally, and at the same time contribute more effectively to the success of the program.

In addition, there are other preservice and inservice requirements which must be specified in the implementation plan. To determine these requirements:

1. examine the qualifications desired in each proposed staff member in terms of knowledge, skills, and interpersonal effectiveness;

2. compare these desired qualifications with the qualifications of persons who are actually available to fill the positions; and

3. identify in which areas discrepancies exist.

Any discrepancies discovered tentatively determine the types of preservice and inservice training programs to be included in the implementation plan. For example, consider the program design in Appendix A. The teacher role was described as responsible for guiding and assisting students in planning, achieving, and evaluating accomplishment; and to direct students to useful resources for learning. Thus the teacher role was described as requiring the skills of a resource person, a contractor, and diagnostician/prescriber. A staff member who is to perform this role may require considerable training and/or assistance (e.g. how to work with students on a one to one basis, and how to work with students in developing learning contracts.) Training for this role may require a number of workshops and/or consultant help.

Although it is recommended that the desired preservice and inservice programs be developed at this time, additional staff training activitiies may emerge during the completion of subtask 7, Plan Staff Orientation.

Outcome

Upon completion of this subtask, your planning group should have a list of staffing needs for the program or project in full-time equivalents and a plan in detail of the kind and extent of preservice and inservice training requirements. If, however, new staff are to be hired, determination of training needs should be delayed until staff are recruited and hired.

SUBTASK 3: DETERMINE MATERIAL, EQUIPMENT, AND OTHER PHYSICAL REQUIREMENTS

> All materials, facilities, and equipment required to initiate and operate the program should be specified during planning, preferably by prospective program staff members themselves.

The implementation plan should include a complete list of all physical requirements, including:

1. curriculum materials, tests, and items needed to develop curriculum materials;
2. instructional facilities and necessary modifications of existing facilities;
3. equipment; and
4. transportation.

These program requirements may be derived from:

*an examination of the proposed sites where the program will operate (for building and remodeling requirements);

*visits to sites of similar programs where much can be learned, by observation and by questioning the on-site staff, about unanticipated physical requirements.

Whenever possible, the program staff should be directly involved in determining physical requirements. Not only will this produce a more accurate budget, it will also allow staff members to know why certain compromises or trade-offs have to be made. A staff that has helped to determine the environment in which it works will usually be positively affected by that environment even if it is not exactly what the staff wanted.

In some cases it will be necessary to proceed with determining physical requirements before the staff is assembled. Obtaining many physical items, e.g., remodeling, complex equipment, requires extensive lead time and it might be detrimental to the program to delay such decisions until the whole staff is assembled.

Outcome

The implementation plan should contain a list of all material, equipment, and physical requirements as well as the amount and where possible the type of material, equipment, or physical modifications proposed.

SUBTASK 4: DETERMINE SYSTEM READINESS

> Now that the basic requirements for program implementation are known, implementation planners should reconsider the school's ability to accommodate the new program, and to identify potential implementation problems and necessary remedial actions.

Neglected Task

Assessment of a school's readiness for a new program is frequently overlooked in implementation planning. In cases where the entire school has been directly involved -- or kept informed of what is going to happen -- the system may be well-prepared to accommodate the new program. However, when considerable integration between the school's existing functions and the program is required but does not exist, a variety of difficulties should be anticipated. The results of this assessment will be helpful in completing the remaining tasks of an implementation plan.

Assessment Variables

Even though all facets of the existing system cannot be systematically evaluated because of the time and costs involved, a number of important areas should be considered in terms of problems which may arise during program implementation:

1. System Load. What is the student/teacher ratio, administrator/teacher ratio, present classroom usage, number of experimental projects presently in operation, number and kind of teachers involved in innovative projects, teachers' extracurricular assignments, etc?

2. System Flexibility. Is experimentation welcome? Are classrooms the private domain of teachers? Are departments within the school closed shops? Are individual staff members aware of total system functioning?

3. System Management. What style of system management is practiced? What is the teacher/administrator relationship? How political is the system? How protective is the system of its "own kind"? What are the administrators' behavioral strengths and deficiencies?

4. System Composition. What is the size and nature of the teacher support staff: counselors, aides, teaching assistants, clerks, volunteers? What is the socio-economic, ethnic, and political composition of the teacher support staff? What is the extent of community involvement and support?

5. System Awareness and Receptivity. How knowledgeable is the staff about the proposed program? Does the staff consider it meaningful and worthwhile? Is there a plan for each teacher directly and indirectly involved to experience personal benefit from the program? Are the students aware of and do they have realistic expectancies of the program? Have parents been appropriately involved and informed? Have all the schools in the district not involved in the program been sufficiently informed?

The degree to which the system is analyzed and how the analysis is acted upon will directly relate to the success of the program. Program directors may consider an emphasis on communication and involvement superfluous, but such an emphasis will help create a participative style of management and decrease resistance to the proposed program. "Excellent" programs can be reduced to "good" programs or worse when communication and involvement are neglected in planning.

Outcome

Because of the analysis of the school's readiness for the new program or project, your group should have developed a statement that describes the probable acceptance of the new program in terms of where potential implementation problems might occur. For example, you might decide that the planned teacher/student ratio for the new program may create friction among staff members not involved in this project, or general resistance from staff is to be expected because of the "newness" of the program, or there may be inadequate management support for certain aspects of the program. Finally, as an outcome of this task, a clear statement of proposed steps or remedial actions to cope with potential problems in this area should be developed.

SUBTASK 5: PLAN STAFF SELECTION

Preparations for obtaining program staff include writing job descriptions, deciding upon staff selection procedures, assigning responsibilities for recruitment, screening, interviewing, and hiring, and preparing job information for dissemination to prospective applicants.

Job Descriptions

Detailed job descriptions for each position required should be prepared, if they are not already available. Some well-designed curriculum programs available from publishers include job descriptions for required program staff positions.

Each job description should briefly describe a number of job characteristics:

1. Relationship to program. How does the particular position fit into the context of the program? How does the position relate to other program staff members?
2. Length of contract. How long is the program expected to be in operation? Has the life span of the program been definitely established (e.g., one, two, or more years) with no possibility of continuation beyond a given date? What are the prospects for obtaining future employment within the system upon program termination?
3. Wages. What is the salary range? What fringe benefits are included?
4. Qualifications. What knowledge, skills, and experience are desired? In what priority?
5. Duties. What are the duties and responsibilities of the job, perhaps stated in terms of expected performance? What preservice or inservice training will be required? Will there be special reporting requirements? What "extracurricular activities" will be required?

The task analysis previously conducted to determine personnel requirements (subtask 2) should provide some of the information necessary to prepare the job descriptions.

Selection Procedures

When detailed job descriptions have been completed, appropriate procedures should be outlined for

- recruitment;
- screening;
- interviewing; and
- selection or reassignment of staff members.

These procedures should be decided upon by the program director in cooperation with the personnel department and/or expert personnel consultants and with other staff members who will be involved in the selection of personnel.

Since the quality of the program staff is without doubt the most important variable in the success of the program, the program director should consider the advantages of employing a skilled personnel consultant either to assist in the planning of the selection procedures or to be directly involved in the selection process. The more professional, honest, and humane the hiring procedures are, the more favorable the attitude of staff members will be toward the program. A program director who operates in a participative management style will take care, during the preparation of job descriptions and during the staff selection process, to ensure that all staff members hired are also capable of operating in this way.

After responsibilities have been assigned to staff members and others regarding their part in the hiring process, the director should see that information on the jobs available is prepared for dissemination.

Outcome

1. Job descriptions as outlined above;
2. a clear statement of the screening procedures, including the hiring timetable and selection criteria; and
3. a brief description of the program so that applicants may better understand their potential role as it relates to the total program.

As soon as possible after the entire staff has been hired and explicit, detailed contracts have been signed, the program director should plan to proceed with the staff orientation outlined in subtask 7.

SUBTASK 6: PLAN PURCHASING SCHEDULE

A time schedule for acquisition of all materials, facilities, and equipment required to operate the program will help to ensure that these resources will be available when they are needed.

Programs often fail because resources are not available at the time required, e.g., test instruments are not available on the dates specified in the evaluation plan. To prevent this, a time schedule can be drawn up indicating what materials will be needed at what times during program implementation. Then, once final program approval is received, the acquisition of resources can proceed efficiently according to the time schedule.

To prepare the time schedule:

1. Review the list of required materials, facilities, and equipment prepared in subtask 3, along with the program design itself, to determine when various materials will be required.

2. Whenever possible, consult with program staff members regarding their preferences as to exact specifications of resources to be acquired.

3. Consult with the purchasing agent(s) about the most efficient means of acquiring resources and the amount of lead time required for timely delivery.

4. Assign responsibilities for carrying out the acquisition schedule to appropriate staff members.

During the implementation, periodically review the time schedule with staff members to be sure that important items will be available on time.

Outcome

A time schedule should be developed which lists all needed acquisitions, estimated time for acquiring them, the steps to be taken in ensuring their arrival, and persons responsible for purchasing.

SUBTASK 7: PLAN STAFF ORIENTATION

This task involves determining the nature of staff orientation, how it is to be accomplished, and who is to be involved.

Initial Presentations

An effective orientation of a new staff does not consist of a simple one-hour meeting at which the director introduces himself, briefly explains the program plan, and asks if there are any questions. Depending upon the size of the program, one or more complete days might be set aside for an indepth orientation of the program team. Possible subjects to be covered by the director and other key persons involved in the original program planning include:

- history of the program;
- who participated;
- problems encountered;
- program objectives;
- program implementation plan;
- program budget;
- any other factors relating to the context in which the program originated and in which it will be implemented; and
- derivation of job descriptions so that staff members can determine how their performance contributes to the total program.

Staff Development

After these initial presentations, the staff, preferably as a group, might analyze and negotiate how each member can contribute to the achievement of program objectives. The staff should begin to understand the necessity of close cooperation and, under the leadership of the director, begin to plan precisely how and when they can work together most effectively. The first orientation session should thus be an occasion for all program team members to:

1. assume a collective responsibility for the program and its objectives;
2. experience the rewards and possible frustrations of close collaboration;
3. learn and respect the individual strengths of each colleague;
4. evaluate their group interactions; and
5. decide how often, when, and for how long they should meet for future staff development sessions.

The director may consider using a facilitator skilled in organization development techniques in this and subsequent staff development sessions to help stimulate the new staff through team-building exercises and provide feedback to group members about their productive and non-productive interactions.

All members of the staff should have copies of all significant program documents before these meetings. Trust-building is fostered by sharing the reasons for decisions and the freedoms and constraints under which the staff is expected to operate.

Organization development and participative management do not begin with the first organization session. They should be underway with the beginning of program development and continue until the program is terminated. A program director who chooses to operate in a participative management style should make this point explicit to all staff members. If this style of management is not understood by the staff members, the director or some organization development consultant might train the staff in the assumptions, concepts, and required skills of participative management. Training should stress that participative management is not a laissez-faire, tender-hearted, permissive style -- it is a tough-minded, honest, open, highly accountable, collegial process which has the potential of working toward the accomplishment of program goals in a productive, creative, and personally rewarding manner.

Outcome

The planning group should prepare a statement that outlines how new program or project staff are to be oriented and involved in further planning and implementation. The statement should detail who is to be oriented, the content of the orientations, who is to be responsible for conducting the orientations, how many sessions are likely to be needed, length of each, time of day, how staff is to be prepared for orientation sessions (e.g., pre-orientation background reading materials).

SUBTASK 8: PLAN OTHER ORIENTATIONS

To ensure appropriate involvement of the participants and the public in program implementation, the implementation plan should provide answers to these questions:

- Who should be informed?
- For what purpose?
- Of what?
- To what extent?
- At what time?
- By what means?

Orient Program Participants

Some type of formal orientation may be required for those who will be directly involved in the program, such as

- students;
- their parents; and
- counselors.

Students should be oriented about what is expected of them while they are participating in the program. While the program is operating, they should have opportunities to express their concerns so that the staff can take appropriate action.

Those who may become indirectly involved in the program, such as

- custodians;
- secretaries; and
- other teachers and counselors who might also work with program participants, need to be informed at least of what the program is and in what ways they might become involved in it.

Public Relations Program

There should also be some effort to disseminate information to members of the public who might be interested in the program and its results. Individuals or groups who have demonstrated a particular interest in the program may require special attention. When these individuals and groups are kept informed and appropriately involved, they can contribute significantly to the success of the program. If they feel left out, they can present additional barriers to smooth implementation.

The aim of the information process is not to sell the program. Rather, the aims are:

- to promote understanding of the program;
- to generate realistic expectancies of program outcomes;
- to obtain well-informed support and involvement;
- to generate useful feedback; and

- to mitigate or even prevent ill-informed opposition to the program.

If the information program is considered a two-way communication channel, it can also serve an important evaluation function for the program. It is useful to plan occasional interpersonal forums where the various publics may be kept informed of progress and may have the opportunity to express their concerns.

If the district retains a public relations or community relations staff, its expertise ought to be utilized by the program staff. Otherwise, assign specific responsibilities for planning and implementing an information dissemination and public relations program to some staff member(s).

SUBTASK 9: DETERMINE COSTS

The implementation plan should include estimates of the costs of all resources required for program operation and should indicate when a more detailed budget will be prepared, by whom, and in what format.

Cost Data

After program implementation tasks have been carefully analyzed to identify required resources, preparing the budget for the program becomes a matter of assigning an estimated cost to each required resource. A well-planned budget should include at least the following items:

1. Program costs. The cost of all personnel, materials, facilities, equipment, transportation, etc., called for in the program design should be specified. These costs figures may have been specified in the program design itself, but if not, the program director will have to determine them at this point.

2. Implementation costs. This includes additional personnel and other resources required to carry out the implementation procedures (e.g., costs associated with staff recruitment and selection, orientation programs, program evaluation, etc.)

3. Indirect costs. If a standard indirect cost rate has been established for the whole system, indirect costs may also be added to the total budget.

4. Income. The budget should clearly indicate, when possible, the various sources of income and, if necessary, what expenditures each income source will cover.

Local budget personnel can be of invaluable technical assistance in (a) providing both direct and indirect cost data and (b) indicating the budget format to be used. It is strongly recommended that planning groups not familiar with budgeting procedures obtain assistance from local budget personnel as early as possible in the planning process.

Budget Format

When a budget is prepared as the culmination of a systematic planning effort, it contains a logic and persuasiveness that ordinary budget displays do not possess. For example, with the use of the program flow chart (see subtask 12), a budget can be planned to provide information on the cost of the total program, on the cost of each task, and on the cost of a particular month of operation, in addition to the line-item totals. The degree of detail required in the budget presentation should be determined by the director either in terms of its communication value or in terms of its contribution to the evaluation program.

If program budget procedures are generally used in the system, the budget may be converted to program budget format. From all data generated thus far, the director should be able to estimate with supporting detail the cost of achieving program objectives.

The well-planned budget, because it can display such a range of information, provides valuable input for

- establishing priorities;
- considering alternatives; and
- evaluating trade-offs.

With regard to trade-offs, for example, if it is suggested that a certain item be cut from the budget (e.g., two days of inservice training), it should be possible to estimate or state what effects this cutback would have on the total program. It should also be possible to state what effect a less expensive alternative would have on the program.

Even if a budget had been allocated before planning for program implementation began, it would still be essential to prepare a new budget on the basis of the analysis of tasks, required resources, etc. This more systematic preparation of a budget might indicate that the program is doomed to failure because the previously determined budget is far too low; on the other hand, systematic planning might reveal that the original budget estimate was overly generous.

Outcome

At this stage of budget development, it is likely that estimated costs can be generated only for each planned task. If this is the case, this section ought to include a specified date when a complete budget will be completed and who is to be responsible for its completion.

SUBTASK 10: DETERMINE SEQUENCE OF TASKS

> After all implementation tasks have been identified, they should be arranged in sequential order to help implementation planners review the planning accomplished thus far and gain a more integrated understanding of the job ahead of them.

Determining the sequence of tasks consists of three steps:

1. Determine which tasks are "critical" in the sense that until they are accomplished subsequent tasks cannot be initiated.
2. Determine which tasks may be initiated simultaneously.
3. Display this information graphically.

An example of a critical task might be the Board of Trustees' approval of a budget, without which the director would not be able to hire personnel or to purchase required materials and equipment. Identifying critical tasks should aid the director immeasurably in setting priorities for action. It is recommended that task worksheets (see Appendix B) be used to examine the sequence. Taping the task sheets to a wall permits the entire planning group to contribute more effectively.

Task Flow Charts

For small programs the sequence of tasks may be effectively displayed in a Task Flow Chart or Task Flow Block Diagram.* A Task Flow Chart is a method of graphically outlining the entire implementation plan in boxes, each of which contains one task, and numbering each box according to its position in the established sequence. For example:

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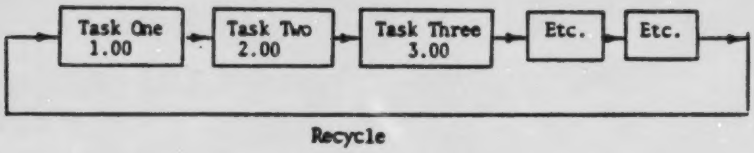
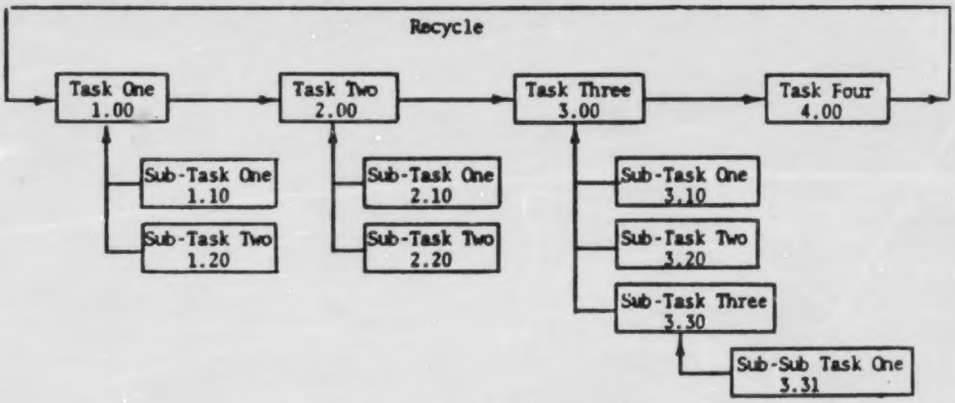
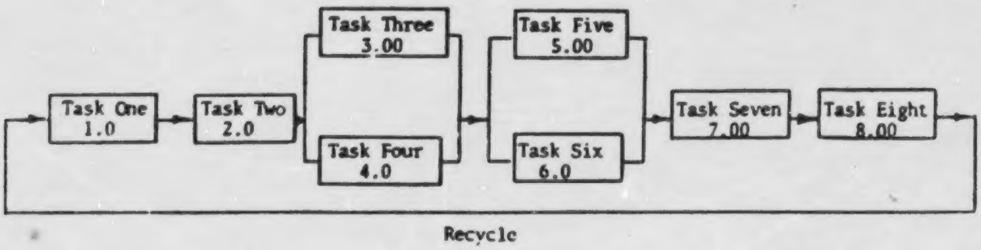
*"Task Flow Chart" and "Task Flow Block Diagram" are usually referred to as "Functional Flow Chart" and "Functional Flow Block Diagram" in systems analysis literature.


Task One
1.00
Task Two
2.00
Task Three
3.00
Etc.
Etc.
Recycle

This Task Flow Chart does not include examples of (a) subtasks or (b) tasks that occur at the same time. An example of subtask charting is:


Recycle
Task One
1.00
Task Two
2.00
Task Three
3.00
Task Four
4.00
Sub-Task One
1.10
Sub-Task Two
1.20
Sub-Task One
2.10
Sub-Task Two
2.20
Sub-Task One
3.10
Sub-Task Two
3.20
Sub-Task Three
3.30
Sub-Sub Task One
3.31

An example of charting tasks that occur at the same time without the associated subtasks is:


Task One
1.0
Task Two
2.0
Task Three
3.00
Task Four
4.0
Task Five
5.00
Task Six
6.0
Task Seven
7.00
Task Eight
8.00
Recycle

For large and complicated programs, the director may wish to use the more complicated but exacting Program Evaluation and Review Technique (PERT).

Outcome

A diagram showing task and subtask sequence and task relationships for the program to be implemented.

SUBTASK 11: ESTABLISH TIMELINE

A program timeline indicating when each implementatin task is to be performed will enable implementation planners to keep abreast of time requirements and will provide a basis for monitoring the program's progress during the implementation and evaluation phase.

The establishment of a program timeline consists of four steps:

1. Assign a date by which each task and subtask should be initiated.

2. Estimate the amount of time required to accomplish each task and subtask.

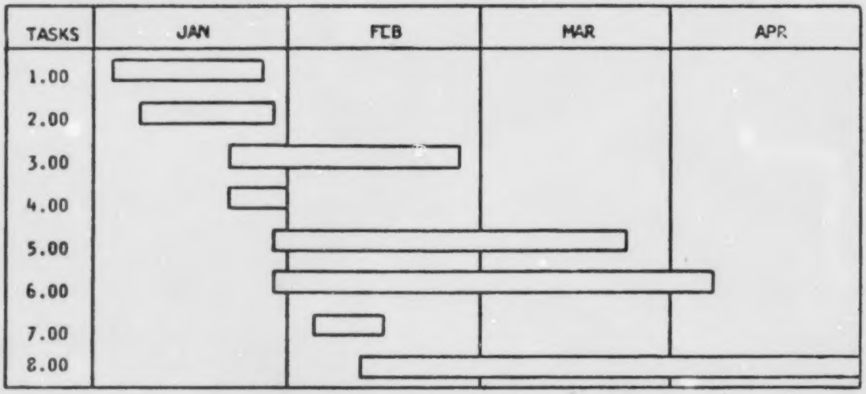
3. Assign the date by which each task and subtask should be completed.

4. Display this information graphically.

Task Flow Charts or other displays showing the planned sequence of implementation tasks will be useful for assigning initiation and completion dates and taking into account the relationship of the tasks to one another.

Bar Charts

For small projects, a bar chart is an effective way of displaying the timeline. A bar chart is a vertical listing of tasks and subtasks, each followed by a horizontal bar indicating beginning and ending dates. Persons responsible for given tasks and other notational information may also be indicated on the chart. Bar charts also provide planners with a "visual picture" of the activities to be accomplished at any given time. Following is an example of a bar chart based on the third Task Flow Chart on the previous page.



The bar chart should be accompanied by the Task Flow Chart since the bar chart alone does not display the interrelationships among tasks. For very large and complicated programs, the PERT procedure is recommended, since it can clearly and precisely specify both timelines and interrelationships.

Outcome

A bar chart showing the estimated beginning and ending dates for each task and subtask.

SUBTASK 12: ARRANGE INDEPENDENT REVIEW

Some type of critique or evaluation of the implementation plan is highly desirable before the plan is submitted to the appropriate decision-making bodies for final review and approval.

1. Small-scale programs. Evaluation of implementation plans for small programs may be accomplished by submitting the plan to a selected group for an independent review. The reviewers selected should have experience relevant to the tasks to be performed. This group, working independently, would be asked to review and comment on the whole plan. They might also be asked to consider in detail certain portions of the implementation plan. Following the receipt of these comments, the original planners would re-examine their work in view of the additional inputs and produce a revised plan.

2. Large-scale programs. Implementation plans for complex programs may require evaluation through some type of simulation process. In district-wide programs where administrative responsibility for the program is shared by many (e.g., all the school principals in the district), such complex issues as accountability, feedback, and coordination usually require intensive review. In a simulation, various people would be asked to assume roles specified in the plan in light of their professional experience and expertise. They would be asked to note questions, observations, and concerns for a later oral critique. It is important that the criticisms of simulation participants be as objective, analytical, and descriptive as possible and that planners recognize these criticisms as constructive.

Outcome

A statement concerning how, when, and by whom, an independent review of the plan will be made.

Implementation as Mutual Adaptation: Change in Classroom Organization

Milbrey Wallin McLaughlin

Most observers believe that the educational innovations undertaken as part of the curriculum reform movement of the 1950s and early 1960s, as well as the innovations that comprised the initiatives of the "Education Decade," generally have failed to meet their objectives.[1] One explanation for these disappointments focuses on the type of innovations undertaken and points out that until recently few educators have elected to initiate innovations that require change in the traditional roles, behavior, and structures that exist within the school organization or the classroom. Instead, most innovative efforts have focused primarily on technological change, not organizational change. Many argue that without changes in the structure of the institutional setting, or the culture of the school, new practices are simply "more of the same" and are unlikely to lead to much significant change in what happens to students.

Since 1970, however, a number of educators have begun to express interest in practices that redefine the assumptions about children and learning that underlie traditional methods--new classroom practices that attempt to change the ways that students, teachers, parents, and administrators relate to each other. Encouraged and stimulated by the work of such writers as Joseph Featherstone, Charles Silberman, and William Glasser, some local schoolmen have undertaken innovations in classroom organization such as open education, multiage grouping, integrated day, differentiated staffing, and team teaching. These practices are not based on a "model" of classroom organization change to be strictly followed, but on a common set of

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convictions about the nature of learning and the purpose of teaching. These philosophical similarities, which can be traced to the work of the Swiss psychologist Piaget, are based on a belief that humanistic, individualized, and child-centered education requires more than incremental or marginal change in classroom organization, educational technology, or teacher behavior.

Because classroom organization projects require teachers to work out their own styles and classroom techniques within a broad philosophical framework, innovations of this type cannot be specified or packaged in advance. Thus, the very nature of these projects requires that implementation be a mutually adaptive process between the user and the institutional setting--that specific project goals and methods be made concrete over time by the participants themselves.

Classroom organization projects were among the local innovations examined as part of Rand's Change-Agent Study.[2] Of the 293 projects surveyed, eighty-five could be classified as classroom organization projects; five of our thirty field sites were undertaking innovation of this nature. The findings of the change-agent study suggest that the experience of these projects should be examined in some detail. At the most general level, the change study concluded that implementation--rather than educational treatment, level of resources, or type of federal funding strategy--dominates the innovative process and its outcomes. The study found that the mere adoption of a "better" practice did not automatically or invariably lead to "better" student outcomes. Initially similar technologies undergo unique alterations during the process of implementation and thus their outcomes cannot be predicted on the basis of treatment alone. Further, the process of implementation that is inherent in classroom organization projects was found to describe effective implementation generally. Specifically, the change-agent study concluded that successful implementation is characterized by a process of mutual adaptation.

Contrary to the assumptions underlying many change strategies and federal change policies, we found that implementation did not merely involve the direct and straightforward application of an educational technology or plan. Implementation was a dynamic organizational process that was shaped over time by interactions between project goals and methods, and the institutional setting. As such, it was neither automatic nor certain. Three different interactions characterized this highly variable process.

One, mutual adaptation, described successfully implemented projects. It involved modification of both the project design and changes in the institutional setting and individual participants during the course of implementation.

A second implementation process, cooptation, signified adaptation of the project design, but no change on the part of participants or the institutional setting. When implementation of this nature occurred, project strategies were simply modified to conform in a pro forma fashion to the traditional practices the innovation was expected to replace--either because of resistance to change or inadequate help for implementers.

The third implementation process, nonimplementation, described the experience of projects that either broke down during the course of implementation or were simply ignored by project participants.

Where implementation was successful, and where significant change in participant attitudes, skills and behavior occurred, implementation was characterized by a process of mutual adaptation in which project goals and methods were modified to suit the needs and interests of participants and in which participants changed to meet the requirements of the project. This finding was true even for highly technological and initially well specified projects; unless adaptations were made in the original plans or technologies, implementation tended to be superficial or symbolic and significant change in participants did not occur.

Classroom organization projects provided particularly clear illustration of the conditions and strategies that support mutual adaptation and thus successful implementation. They are especially relevant to understanding the operational implications of this change-agent study finding for policy and practice not only because mutual adaptation is intrinsic to change in classroom organization, but also because the question of institutional receptivity does not cloud the view of effective implementation strategies afforded by these projects.

The receptivity of the institutional setting to a proposed innovation varied greatly among the projects we examined--from active support to indifference to hostility. The amount of interest, commitment, and support evidenced by principal actors had a major influence on the prospects for successful project implementation. In particular, the attitudes and interest of central administrators in effect provided a "signal" to project participants as to how seriously they should take project goals and how hard they should work to achieve them. Unless participants perceived that change-agent projects represented a school and district educational priority, teachers were often unwilling to put in the extra time and emotional investment necessary for successful implementation. Similarly, the attitudes of teachers were critical. Unless teachers were motivated by professional concerns (as opposed to more tangible incentives such as extra pay or credit on the district salary scale, for example), they did not expend the extra time and energy requisite to the usually painful process of implementing an innovation.

Classroom organization projects were almost always characterized by high levels of commitment and support for their initiation, both at the district and at the building level. This is not surprising when we consider the risk and difficulty associated with these projects; it is unlikely that a district would elect to undertake a project of this nature unless they believed strongly in the educational approach and were committed to attempting the changes necessary to implement it.

In fact, classroom organization projects possess none of the features traditionally thought to encourage local decision makers to adopt a given innovation:

1. Ease of explanation and communication to others.
2. Possibility of a trial on a partial or limited basis.
3. Ease of use.
4. Congruence with existing values.
5. Obvious superiority over practices that existed previously.[3]

Innovations that focus on classroom organization are at odds with all five of these criteria. First, since there is no specific "model" to be followed, it is difficult to tell people how these approaches operate. Advocates can only offer general advice and communicate the philosophy or attitudes that underlie innovation in classroom organization and activities.

Second, although open classroom or team-teaching strategies can be implemented slowly, and can be installed in just one or two classrooms in a school, it is generally not possible to be "just a little bit" open or just a "sometime" part of a team-teaching situation. The method is based on fundamental changes which are hard to accomplish piecemeal.

Third, change in classroom organization is inherently very complex. Innovations of this nature require the learning of new attitudes, roles and behavior on the part of teachers and administrators--changes far more difficult to bring about than the learning of a new skill or gaining familiarity with a new educational technology. Classroom organization changes also typically require new arrangements of classroom space, the provision of new instructional materials, and usually new school scheduling and reporting practices.

Fourth, strategies of open education or team teaching are a radical departure from the traditional or standard practices of a school, district, or teacher. Change in classroom organization means changing deeply held attitudes and customary behavior. These projects, by attempting to change organizational structure and goals, attempt to affect the fundamental nature of the organization and are therefore basically incongruent with existing values.

Fifth, although proponents argue that humanistic, child-centered education represents a big advance, the objective evidence is ambiguous. Most evaluations of informal classrooms conclude that participating children do better on affective measures, but there is little evidence of significant cognitive differences that could confidently be attributed to open classrooms themselves. An administrator comtemplating a change in classroom organization is confronted with a complicated innovation that shows no clear advantage over existing practices--at least in the ways that often matter most to school boards, voters, and anxious parents.

Thus, given the complex, unspecified, and inherently difficult nature of these projects, they were rarely initiated without the active support and commitment of district officials and participants. Consequently, the insufficient institutional support that negatively influenced implementation in other projects and so made it difficult to obtain a clear picture of the strategic factors affecting project implementation (i.e., did disappointing implementation result from a lack of enthusiasm or from inadequate training?) generally was not a problem for classroom organization projects. Variance in the implementation outcome of classroom organization projects, consequently, can be attributed in large measure to the project's particular implementation strategy.

For classroom organization projects, as for other change-agent projects, institutional receptivity was a necessary but not a sufficient condition for successful implementation. Unless project implementation strategies were chosen that allowed institutional support to be engaged and mutual adaptation to occur, project implementation foundered. A project's particular implementation strategy is the result of many local choices about how best to implement project goals and methods. What seems to be the most effective thing to do? What is possible given project constraints? What process fits best with local needs and conditions? Decisions about the type and amount of training, the planning necessary, and project participants are examples of such choices. They effectively define how a proposed innovation is put into practice. Implementation strategies are distinguishable from project treatment. That is, the educational method chosen for a project (i.e., team teaching, diagnostic/prescriptive reading) is different from the strategies selected for implementing the method. No two reading projects, for example, employ quite the same process or strategy for achieving their almost identical goals.

IMPLEMENTATION STRATEGY

Each project employs its own combination of strategies that effectively defines its implementation strategy. Thus, in addition to identifying especially effective component strategies, it is meaningful to examine how and why the various individual strategies interact with each other to form a "successful" implementation strategy and to promote mutual adaptation. The experience of classroom organization projects suggests at least three specific strategies that are particularly critical and that work together to form an adaptive implementation strategy: local materials development; ongoing and concrete staff training; iterative, on-line planning combined with regular and frequent staff meetings.

Local Material Development

In almost all of the classroom organization projects, the staff spent a substantial amount of time developing materials to use in the project classrooms. These materials either were developed from scratch or put together from bits of commercially-developed materials. Although these activities were sometimes undertaken because the staff felt they couldn't locate appropriate commercial materials, the real contribution lay not so much in "better pedagogical products" but in providing the staff with a sense of involvement and an opportunity to "learn-by-doing." Working together to develop materials for the project gave the staff a sense of pride in its own accomplishments, a sense of "ownership" in the project. It also broke down the traditional isolation of the classroom teacher and provided a sense of "professionalism" and cooperation not usually available in the school setting. But even more important, materials development provided an opportunity for users to think through the concepts which underlay the project, in practical, operational terms--an opportunity to engage in experience-based learning. Although such "reinvention of the wheel" may not appear efficient in the short run, it appears to be a critical part of the individual learning and development necessary for significant change.

Staff Training

All the classroom organization projects we visited included both formal and informal, preservice and inservice staff training. For example, one project's formal training took place in a two-week summer session before the project began; its informal development activities had been extensive, providing for almost constant interaction among project staff. Almost all of these projects provided preservice training that included observations in operating classrooms. One open classroom project staff even participated in a trip to observe British infant schools. All projects also conducted regular workshops throughout the first three years of project implementation.

One-shot training, or training heavily concentrated at the beginning of the project, was not effective. Although such training designs have the virtues of efficiency and lower cost, they ignore the critical fact that project implementors cannot know what it is they need to know until project operations are well underway. This is generally true for all innovative efforts, but particularly salient in the case of amorphous classroom organization projects. There is just so much that a would-be implementor can be taught or can understand until problems have arisen in the course of project implementation, and solutions must be devised. Training programs that attempt to be comprehensive and cover all contingencies at the outset are bound to miss their mark and also to be less than meaningful to project participants.

Project staffs agreed that staff development and training activities were a critical part of successful implementation. They also agreed that some kinds of training activities were more useful than others. With few exceptions, visits by outside consultants and other outside "experts" were not considered particularly helpful. Teachers in all the change-agent projects we examined complained that most visiting consultants could not relate to the particular problems they were experiencing in their classrooms, or that their advice was too abstract to be helpful. Where outside experts were considered useful, their participation was concrete and involved working closely with project teachers in their classrooms or in "hands-on" workshops. However, it was unusual for outside consultants to have either the time or the inclination to provide assistance in other than a lecture format. Such expert delivery of "truth and knowledge," however, was seldom meaningful to participants, and foreclosed more powerful learning opportunities.

The sessions participants thought most useful were regular meetings of the project staff with local resource personnel in which ideas were shared, problems discussed, and support given. Materials development often provided the focus for these concrete, how-to-do-it training sessions. Visits to other schools implementing similar projects were also considered helpful; the teachers felt that seeing a similar program in operation for just a few hours was worth much more than several days of consultants delivering talks on philosophy.

Some commentators on the outcomes of planned change contend that where innovations fail, particularly innovations in classroom organization, they fail because their planners overlooked the "resocialization" of teachers. Even willing teachers have to go through such a learning (and unlearning) process in order to develop new attitudes, behaviors, and skills for a radically new role. Concrete, inquiry-based training activities scheduled regularly over the course of project implementation provide a means for this developmental process to occur.

Adaptive Planning and Staff Meetings

Because of their lack of prior specification, almost all classroom organization projects engaged in adaptive or on-line planning. Planning of this nature is a continuous process that establishes channels of communication and solicits input from a representative group of project participants. It provides a forum for reassessing project goals and activities, monitoring project activities, and modifying practices in light of institutional and project demands. Planning of this nature has a firm base in project and institutional reality; thus issues can be identified and solutions determined before problems become crises. Just as one-shot training activities can neither anticipate the information needs of implementors over time nor be comprehensible to trainees in the absence of direct experience with particular problems, neither can highly structured planning activities that attempt extensive prior specification of operational procedures and objectives effectively address all contingencies in advance or foresee intervening local conditions. Often problems arise and events occur during the course of implementation that are unexpected and unpredictable. As a result, project plans drawn up at one point in time may or may not be relevant to project operations at a later date. Planning activities that are on-going, adaptive, and congruent with the nature of the project and the changing institutional setting are better able to respond to these factors.

Frequent and regular staff meetings were often used as a way to carry out project planning on a continuous basis. Projects that made a point of scheduling staff meetings on a frequent and regular basis had fewer serious implementation problems and greater staff cohesiveness. Staff meetings not only provided a vehicle for articulating and working out problems, but they also gave staff a chance to communicate project information, share ideas, and provide each other with encouragement and support.

Finding time for these meetings or planning activities was a problem tht some districts were able to solve and others were not. One classroom organization project, for example, arranged time off one afternoon a week for meetings. Project participants almost universally singled out these meetings as one of the most important factors contributing to project success. Such time to share ideas and problems was, in the view of all classroom organization respondents, especially important in the rough and exhausting first year of the project. Where meetings were infrequent or irregular, morale was noticeably lower and reports of friction within the project were higher.

Past research on implementation is almost unanimous in citing "unanticipated events" and "lack of feedback networks" as serious problems during project implementation.[4] Routinized and frequent staff meetings combined with on-going, iterative planning can serve to institutionalize an effective project feedback structure, as well as provide mechanisms that can deal with the unanticipated events that are certain to occur.

TWO OPEN CLASSROOM PROJECTS[5]

The critical role that such elements of an adaptive implementation strategy play in project implementation and outcomes is best illustrated by describing the experiences of two open classroom projects that were similar in almost every respect--resources, support and interest, target group background characteristics--but differed significantly in implementation strategy and in implementation outcome. The Eastown open education project had extensive and ongoing staff training, spent a lot of staff time and energy on materials development, arranged for staff to meet regularly, and engaged in regular formative evaluation. This project was also well implemented, ran smoothly, and met its objectives. In fact, this project received validation as a national exemplary project in its second year--a year before it was theoretically eligible.

The very similar Seaside project, in contrast, did not employ such an implementation strategy. Because of late funding notification, there was little time for advance planning or preservice training; project teachers were asked to implement a concept that they supported but that few had actually seen in operation.

The planning that was done subsequently was mainly administrative in nature. The inservice training was spotty and was offered almost totally by "outside experts." The Seaside project did no materials development but instead tried to convert traditional materials to the goals of open education. This project has not only been less successful than hoped, but in our judgment, its central percepts and objectives are yet to be fully implemented. Teacher classroom behavior exhibits only a very superficial understanding of the rhetoric of open education; our observations led to the conclusion that teachers have yet to understand the practical implications of the tenets of open education, and have made only symbolic use of the more standard methods. For example, in many of the classrooms we visited, although the teacher had set up interest centers, these centers had not been changed in six or seven months. Thus they failed to serve their purpose of providing a continually changing menu of material for students. Teachers in the Seaside project had dutifully rearranged their classroom furniture and acquired rugs--as befits the open classroom--but even in this changed physical space, they continued to conduct their classes in a traditional manner. A student teacher commented that many of the teachers in this school conducted their class in the small groups or individualized manner appropriate to this educational philosophy only on visitors' day. In our judgment, many of the teachers in the school honestly wanted to implement open education, and many sincerely believed that they had accomplished that goal. But, in our view, implementation in this project was only pro forma--largely because of the absence of implementation strategies that would allow learning, growth, and development or mutual adaptation to take place.

SUMMARY

In summary, overcoming the challenges and problems inherent to innovations in classroom organization contributes positively and significantly to their effective implementation. The amorphous yet highly complex nature of classroom organization projects tends to require or dictate an adaptive implementation strategy that permits goals and methods to be reassessed, refined and made explicit during the course of implementation, and that fosters "learning-by-doing."

The adaptive implementation strategies defined by effectively implemented local projects were comprised of three common and critical components--local materials development; concrete, on-going training; on-line or adaptive planning and regular, frequent staff meetings. These elements worked together in concert to promote effective implementation. Where any one component was missing or weak, other elements of the overall implementation strategy were less effective than they might be. A most important characteristic these component strategies hold in common is their support of individual learning and development--development most appropriate to the user and to the institutional setting. The experience of classroom organization projects underlines the fact that the process of mutual adaptation is fundamentally a learning process.

General Implications

It is useful to consider the implications of the classroom organization projects and the general change-agent study findings in the context of the on-going debate about the "implementation problem."

The change-agent study is not the first research to point to the primary importance of implementation in determining special project outcomes.[6] A number of researchers and theoreticians have come to recognize what many practitioners have been saying all along: Educational technology is not self-winding. Adoption of a promising educational technology is only the beginning of a variable, uncertain, and inherently local process. It is the unpredictability and inconsistency of this process that have generated what has come to be called the "implementation problem."

There is general agreement that a major component of the "implementation problem" has to do with inadequate operational specificity.[7] There is debate concerning who should make project operations more specific, how it can be done, and when specificity should be introduced.

One approach prescribes more specificity prior to local initiation. Adherents of this solution ask that project planners and developers spell out concrete and detailed steps or procedures that they believe will lead to successful project implementation. It is hoped that increased prior operational specificity will minimize the necessity for individual users to make decisions or choices about appropriate project strategies or resources as the project is implemented. This essentially technological approach to the "implementation problem"--exemplified at the extreme by "teacher-proof" packages--aims at standardizing project implementation across project sites. It is expected that user adherence to such standardized and well-specified implementation procedures will reduce local variability as project plans are translated into practice and so lead to predictable and consistent project outcomes, regardless of the institutional setting in which the project is implemented.

A second approach takes an organizational rather than a technological perspective and focuses primarily on the development of the user, rather than on the prior development of the educational treatment or product. This approach assumes that local variability is not only inevitable, but a good thing if a proposed innovation is to result in significant and sustained change in the local setting. This approach also assumes that the individual learning requisite to successful implementation can only occur through user involvement and direct experience in working through project percepts. Instead of providing packages which foreclose the necessity for individuals to make decisions and choices during the course of project implementation, proponents of this perspective maintain that implementation strategies should be devised that give users the skills, information, and learning opportunities necessary to make these choices effectively. This approach assumes that specificity of project methods and goals should evolve over time in response to local conditions and individual needs. This second solution to the "implementation problem," in short, assumes that mutual adaptation is the key to effective implementation.

The findings of the change-agent study strongly support this second perspective and its general approach to the "implementation problem." We found that all successfully implemented projects in our study went through a process of mutual adaptation to some extent. Even fairly straightforward, essentially technological projects were either adapted in some way to the institutional setting--or they were only superficially implemented and were not expected to remain in place after the withdrawal of federal funds. Where attempts were made to take short cuts in this process--out of concern for efficiency, for example--such efforts to speed up project implementation usually led to project breakdown or to only pro forma installation of project methods.

Viewed in the context of the debate over the "implementation problem," these findings have a number of implications for change-agent policies and practice. At the most general level, they suggest that adaptation, rather than standardization, is a more realistic and fruitful objective for policy makers and practitioners hoping to bring about significant change in local educational practice. Such an objective would imply change-agent policies that focused on implementation, not simply on adoption--policies that were concerned primarily with the development of users and support of adaptive implementation strategies. Specifically, the classroom organization projects suggest answers to the strategic issues of "who, how, and when" innovative efforts should be made operationally explicit, and how user development can be promoted.

Furthermore, the classroom organization projects, as well as other innovative efforts examined as part of the change-agent study, imply that the would-be innovator also must be willing to learn and be motivated by professional concerns and interests if development is to take place. Thus, change-agent policies would be well advised not only to address the user needs that are part of the implementation process per se, but also to consider the developmental needs of local educational personnel that are requisite to the initial interest and support necessary for change-agent efforts. It is not surprising that teachers or administrators who have not been outside their district for a number of years are less eager to change--or confident in their abilities to do so--than planners would hope. Internships and training grants for administrators, or travel money and released time for teachers to participate in innovative practices in other districts, are examples of strategies that may enable educational personnel to expand their horizons and generate enthusiasm for change.

The findings of the change-agent study and the experience of the classroom organization projects also have implications for the dissemination and expansion of "successful" change-agent projects. They suggest, for example, that an effective dissemination strategy should have more to do with people who could provide concrete "hands-on" assistance than with the transcription and transferral of specific successful project operations. It is somewhat ironic that staff of the "developer-demonstrator" projects who last year pointed to the central importance of local materials development are, in their dissemination year, packaging their project strategies and materials without a backward glance. Indeed, the change-agent findings concerning the importance of mutual adaptation and "learning by doing" raise a number of critical questions for educational planners and disseminators. For example, to what extent can this developmental process be telescoped as project accomplishments are replicated in a new setting? What kinds of "learning" or advice can be transferred? If adaptation is characteristic of effective implementation and significant change, what constitutes the "core" or essential ingredients of a successful project?

District administrators hoping to expand successful project operations face similar issues. Our findings suggest that--even within the same district--replication and expansion of "success" will require that new adopters replicate, in large measure, the developmental process of the original site. While there are, of course, general "lessons" that original participants can transfer to would-be innovators, there is much that the new user will have to learn for himself.

In summary, the experience of classroom organization projects together with the general change-agent study findings suggest that adaptation should be seen as an appropriate goal for practice and policy--not an undesirable aberration. These findings suggest a shift in change-agent policies from a primary focus on the delivery system to an emphasis on the deliverer. An important lesson that can be derived from the change-agent study is that unless the developmental needs of the users are addressed, and unless project methods are modified to suit the needs of the user and the institutional setting, the promises of new technologies are likely to be unfulfilled. Although the implementation strategies that classroom organization projects suggest will be effective represent "reinvention of the wheel" to a great extent--an unpalatable prospect for program developers, fiscal planners, and impatient educational policy makers--the experience of these projects counsels us that a most important aspect of significant change is not so much the "wheel" or the educational technology but the process of "reinvention" or individual development. Though new educational technologies are undoubtedly important to improved practices, they cannot be effective unless they are thoroughly understood and integrated by the user. The evidence we have seen strongly suggests that the developmental process of mutual adaptation is the best way to ensure that change efforts are not superficial, trivial, or transitory.

FOOTNOTES

[1] This essay is a revision of a paper presented at the March 1975 American Educational Research Association meeting in Washington, D.C. It is based on the data collected for The Rand Corporation study of federal programs supporting educational change. However, the interpretation and speculations offered in this paper are my sole responsibility and do not necessarily represent the views of The Rand Corporation, or the study's sponsor, the United States Office of Education, or my colleague Paul Berman, who has been so helpful in formulating this paper.

[2] The conceptual model, methodology, and results of the first year of the Rand Change-Agent Study are reported in four volumes: Paul Berman and Milbrey Wallin McLaughlin. Federal Programs Supporting Educational Change, Vol. I: A Model of Educational Change. Santa Monica, Calif.: Rand Corporation, R-1589/1-HEW, April 1975; Paul Berman and Edward W. Pauly. Federal Programs Supporting Educational Change, Vol. II: Factors Affecting Change Agent Projects. Santa Monica, Calif.: Rand Corporation, R-1589/2-HEW, April 1975, Peter W. Greenwood, Dale Mann, and Milbrey Wallin McLaughlin. Federal Programs Supporting Educational Change, Vol. III: The Process

of Change. Santa Monica, Calif.: Rand Corporation, R-1589/3HEW, April 1975; and Paul Berman and Milbrey Wallin McLaughlin. Federal Programs Supporting Educational Change, Vol. IV: The Findings in Review. Santa Monica, Calif.: Rand Corporation, R-1589/4-HEW, April 1975. Four technical appendices to Volume III describe in detail the federal program management approach, state education agency participation, and each case studies for each of the programs in the study.

[3] E. Rogers and F. Shoemaker. Communications of Innovation. New York, N.Y.: Free Press, 1962.

[4] See for example, W.W. Charters et al. Contrasts in the Process of Planning Change of the School's Institutional Organization, Program 20. Eugene, Ore.: Center for the Advanced Study of Educational Administration, 1973; O. Carlson et al. Change Processes in the Public Schools. Eugene, Ore.: Center for the Advanced Study of Educational Administration, 1971; M. Fullan and A. Pomfret. Review of Research on Curriculum Implementation. Toronto, Ont.: The Ontario Institute for Studies in Education, April 1975; M. Shipman. Inside a Curriculum Project. London, Eng.: Methuen, 1974; N.C. Gross et al. Implementing Organizational Innovations. New York, N.Y.: Basic Books, 1971; and L.M. Smith and P.M. Keith. Anatomy of Educational Innovations: An Organizational Analysis of an Elementary School. New York, N.Y.: John Wiley, 1971.

[5] Project and site names are fictitious.

[6] See especially the analysis of this debate in Fullan and Pomfret, op. cit. See also E.C. Hargrove. The Missing Link: The Study of the Implementation of Social Policy, Washington, D.C.: The Urban Institute, 1975, paper 797-1; and W. Williams, "Implementation Analysis and Assessment," Public Policy Paper No. 8, Institute of Governmental Research, University of Washington, February 1975.

[7] See Fullan and Pomfret, op. cit.

Concerns-Based Inservice Training: An Overview of the Concepts, Research and Practice

Gene E. Hall

Today's highly complex and dynamic shifts in student bodies, the structure and content of curriculum, societal expectations, and tightening of budgets are pressing teachers to be constantly developing new skills and resources, and refining already established competencies. The need for relevant, efficient, and effective inservice training to facilitate teacher improvement is clear. How to address the need is not so clear. Teacher educators and staff developers are asking: How do we make inservice training more effective and on target in meeting the needs of teachers? When should inservice training be delivered and how can it be designed to be most efficient, economical, and effective? As is suggested by the holding of this conference, developing answers to these questions requires a great deal of discussion and analysis, and must be viewed from many different perspectives. Further, it is clearly an international problem.

This paper is not a presentation of the ultimate solution. Rather, this is the presentation of one researcher and his colleagues who have been studying the problems and experiences of teachers as they have been involved in implementing various educational process and product innovations. Hopefully, the ideas will provide a way of organizing and thinking about issues in inservice teacher training.

In this paper some concepts and findings of our research will be described. More detailed background documentation will be referenced when appropriate. Further, as I present each concept or finding, I will attempt to raise questions and implications that apply to the practice of inservice teacher education and future research on change.

Reprinted from a paper presented at the Conference on School-Focused Inservice Training, March 2-3, 1978, Bournemouth, England, by permission of the author.

The paper begins with a set of assumptions that underlie our views of change and the individuals experiencing change in schools and colleges. There follow descriptions of each of three key diagnostic dimensions of the Concerns-Based Adoption Model. For each dimension, concepts will be briefly described, some illustrative research presented, and implications drawn. The paper will then conclude with a description of a present research activity in which the three diagnostic variables are being used as the conceptual and diagnostic basis for a three-year concerns-based implementation effort in a large school system. In the final paragraphs of this paper, several principles will be listed as guidelines for designing and managing concerns-based inservice teacher training.

CBAM ASSUMPTIONS

Development of the Concerns-Based Adoption Model (CBAM) (Hall, Wallace & Dossett, 1973) was based upon extensive experience in implementing educational innovations in school and college settings. Underlying the model are several assumptions which set the perspectives from which we view the change process in schools and colleges. The present research activities, focused on the initial verification of several of the key components of the CBAM, are based upon these assumptions, as is the view of inservice teacher training developed in this paper.

Before listing any of the assumptions, I think it is important to make a brief comment about the term, inservice teacher training. In the United States at least, at this time, there is a great deal of discussion about what specifically inservice teacher education entails and whether inservice teacher education training is different from "staff development." For the purposes of this paper, the term inservice teacher training will be used. The objective implied in inservice teacher training is one of providing resources, skill training and consultation; i.e., technical assistance, to teachers as they are developing new or different capacities. However, the concepts and ideas that will be described apply equally to staff development, taking a new job, a department reorganization, or constructing a new building.

1. Change in schools and colleges is a process, not an event. All too often it appears that policy level decision makers, administrators in schools and, in many instances, individual teachers assume that change is made at a point in time as a result of some sort of profound decision, legislative act or cataclysmic event. It is assumed that the teacher will change from using one reading text and instantaneously demonstrate great

sophistication in using another. Or it is assumed that with the opening of school in the fall teachers will automatically be effective teamers. However, with the CBAM, change is viewed as taking time and entailing movement through a series of phases and stages.

2. The individual needs to be the primary focus of intervention for change in the classroom. For other change models (e.g., organizational development), the composite institution is viewed as the unit of intervention and the emphasis is placed upon improving communication and other organization norms and behaviors. From the CBAM perspective, the emphasis is placed on working with the individual teachers and administrators in terms of their roles and how they function with the innovation. Further, we would argue that the institution cannot be viewed as having changed until the individuals within the institution have changed.

3. Change is a highly personal experience. All too often it seems that inservice teacher educators, administrators and other change facilitators are overly attentive to the trappings and technology of the innovation and ignore the perceptions and feelings of the people experiencing the change process. In the CBAM, it is assumed that the change process has a personal dimension to it and that in many instances the personal dimension is of more critical importance to success or failure of the change effort than is the amount of technical support for the innovation. Since change is brought about by individuals, their personal feelings and perceptions, satisfactions, frustrations, concerns and motivations all play a part in determining success or failure of a change initiative.

4. Full description of the innovation in operation is a key variable. All too frequently it appears that innovation developers have not clearly or fully developed operational definitions of their innovations. Change facilitators and teachers do not know what the innovation is supposed to look like when it is implemented. Thus, another key assumption for concerns-based change is that there must be a full description of what the innovation entails when it is fully in use. Note that for the purposes of discussion here, the term innovation will be used to encompass both process (e.g., team teaching), and product (e.g., a new reading text) changes.

5. There are identifiable stages and levels of the change process as experienced by individuals. The change

process is not an undifferentiated continuum. There are identifiable stages that individuals move through in their perceptions and feelings about the innovation, and identifiable skill levels that individuals move through as they develop sophistication in using the innovation.

6. Inservice teacher training can be best facilitated for the individual by use of a client-centered diagnostic/prescriptive model. To deliver relevant and supportive inservice teacher training, change facilitators need to diagnose where their clients are in the change process and target their interventions toward their diagnosed needs. In all too many inservice activities the trainers' needs are addressed, not the teachers'.

7. The change facilitator needs to work in an adaptive/systematic way. Because change is a process and because the focus for concerns-based inservice training is on individuals as they are involved in change, the change facilitator must constantly assess and reassess the state of the change effort. Change facilitators must constantly adapt their interventions in accord with the latest diagnostic information. And all of this needs to be done with constant awareness of the larger-organization context. The individuals involved in the change represent a subsystem of the larger system. Interventions made on them may have consequences elsewhere and actions and events that occur elsewhere within the system may in turn impact the subsystem that is the unit of change. Thus, the change facilitator/teacher trainer is constantly under conflicting pressures. On one hand, the change facilitator needs to be working diagnostically and prescriptively with the individual and, at the same time, the change facilitator must constantly keep in mind the larger system and its actions and reactions as the change process unfolds.

Based upon these assumptions then, the Concerns-Based Adoption Model has been developed. Within the CBAM, three key variables can serve as diagnostic tools for developing a clearer focus on what is happening with individual teachers who are the clients of the inservice teacher training programs and the frontline users of educational innovations. These three dimensions are: the teacher's Stages of Concern About the Innovation and Levels of Use of the Innovation, and Innovation Configurations. In combination, these three variables provide the change facilitator with the diagnostic tools and frame of reference to design and conduct concerns-based inservice teacher training and manage the change process. The larger organizational and user systems context will not be addressed in this paper. Rather, the focus will be on individual and innovation diagnosis and the design of concerns-based inservice teacher training. Each of the three variables named above will be described and then a brief illustration of a concerns-based inservice teacher training program will be presented.

STAGES OF CONCERN ABOUT THE INNOVATION

One of the key assumptions of the CBAM is that change is a personal experience. Everyone, as they approach a change, as they initially implement an innovation, and as they develop skill in using the innovation, will have certain perceptions, feelings, motivations, frustrations, and satisfaction about the innovation and the change process. In the CBAM, the concept of "concerns" has been developed to describe these perceptions, feelings and motivations of innovation users and nonusers. Project research has initially verified a set of stages that people appear to move through as they are involved in innovation implementation. These Stages of Concern About the Innovation provide one key diagnostic tool for determining the content and delivery of inservice teacher training activities.

The concept of concerns originated with research done by Frances Fuller (1969, 1970) at the Research and Development Center for Teacher Education at the University of Texas at Austin. Fuller, in her research, identified a set of concerns that preservice teachers expressed as they moved through their teacher education program. These concerns changed from initial, unrelated concerns about teaching ("I am concerned about getting a ticket to the rock concert next Saturday night."); to concerns about self in relation to teaching ("I wonder if I can do it."); to task concerns about teaching ("I'm having to work all night to prepare my lesson plans for the next day."); to impact concerns ("Are the kids learning what they need?"). All together, Fuller identified six different levels of concern that preservice teachers expressed at different points in their teacher training programs.

As the concept of teacher concerns was being disseminated, it became apparent that the concept applied in similar fashion to individual teachers and college professors as they were involved in implementing various educational innovations. Seven Stages of Concern About the Innovation were identified (see Figure 1). It appears that a person's Stages of Concern about an innovation move through the progression from self, to task, to impact that Fuller had identified.

Figure 1

STAGES OF CONCERN ABOUT THE INNOVATION*

0 AWARENESS: Little concern about or involvement with the innovation is indicated.

1 INFORMATIONAL: A general awareness of the innovation and interest in learning more detail about it is indicated. The person seems to be unworried about himself/herself in relation to the innovation. She/he is interested in substantive aspects of the innovation in a selfless manner such as general characteristics, effects, and requirements for use.

2 PERSONAL: Individual is uncertain about the demands of the innovation, his/her inadequacy to meet those demands, and his/her role with the innovation. This includes analysis of his/her role in relation to the reward structure of the organization, decision making and consideration of potential conflicts with existing structures or personal commitment. Financial or status implications of the program for self and colleagues may also be reflected.

3 MANAGEMENT: Attention is focused on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, scheduling, and time demands are utmost.

4 CONSEQUENCE: Attention focuses on impact of the innovation on students in his/her immediate sphere of influence. The focus is on relevance of the innovation for students, evaluation of student outcomes, including performance and competencies, and changes needed to increase student outcomes.

5 COLLABORATION: The focus is on coordination and cooperation with others regarding use of the innovation.

6 REFOCUSING: The focus is on exploration of more universal benefits from the innovation, including the possibility of major changes or replacement with a more powerful alternative. Individual has definite ideas about alternatives to the proposed or existing form of the innovation.

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*Original concept from Hall, G. E., Wallace, R. C., Jr., & Dossett, W. A. A developmental conceptualization of the adoption process within educational institutions. Austin: Research and Development Center for Teacher Education, The University of Texas, 1973.

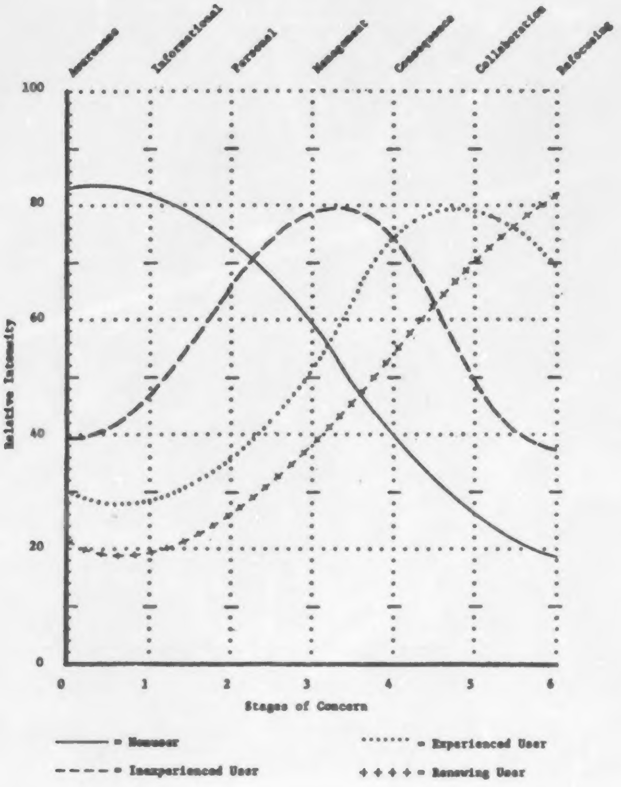
SoC Research

Subsequent research with the concept of Stages of Concern (SoC) has focused on the development of a reliable and valid measurement procedure for assessing SoC (Hall, Rutherford & George, 1977) and conducting a series of cross-sectional and longitudinal studies to initially verify that SoC exist. The findings from these research studies confirm the existence of Stages of Concern and suggest, although this is not conclusive, that the phenomenon is more developmental than one might want to believe.

During implementation of an innovation it appears that Stages 0, 1 and 2 concerns will initially be most intense. As the implementation progresses, Stage 3, Management concerns become more intense, with Stages 0, 1 and 2 concerns decreasing. With time, the Impact concerns of Stages 4, 5 and 6 become most intense. Another finding from SoC research is that an individual does not have concerns on only one stage at a time; there is a concerns "profile" with some stages being relatively more intense and other stages having lower intensity concerns. As an implementation effort evolves, SoC profiles can be seen to change in wave patterns (see Figure 2).

Figure 2

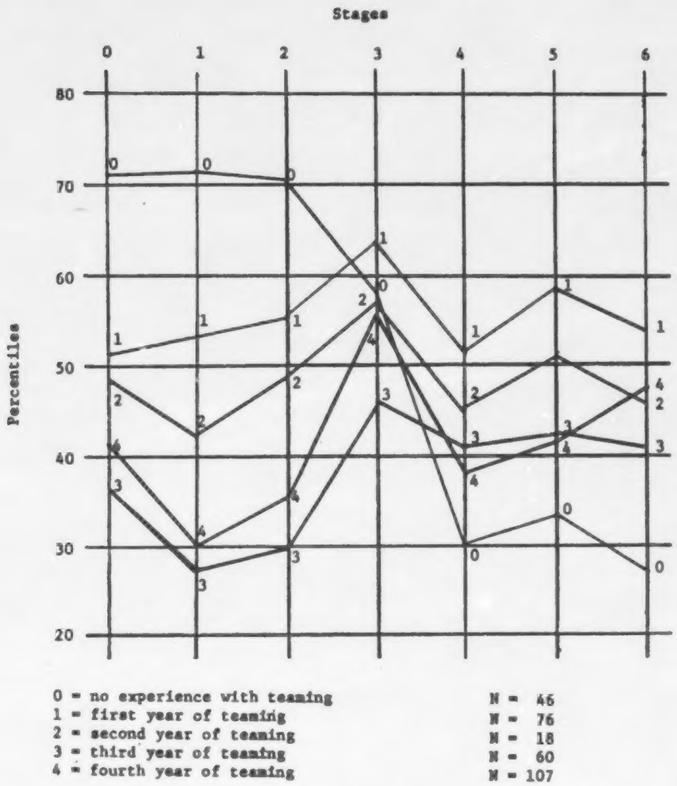
Hypothesized Development of Stages of Concern



One sample of research findings that have direct implications for inservice teacher training is presented in Figure 3. Figure 3 summarizes the cross-sectional sampling of 307 elementary school teachers in regard to the innovation, team teaching.

Figure 3

Distribution of Teachers' Concerns About Teaming According to Years of Experience with Teaming



In these data, the "concerns profile" made by connecting the "O" points is typical of what is found for nonusers of an innovation. Their most intense concerns are at Stages 0, 1 and 2 and their least intense concerns are at Stages 4, 5 and 6. First year users of teaming have their most intense concerns at the Management level, Stage 3. Second year teamers also had their most intense concerns at the Management level as did third and fourth-through-tenth year users of teaming. It appears that with the innovation of teaming, Management concerns are not quickly resolved. From other analyses of individual teams in this sample (Hall & Rutherford, 1976), it is clear that there are some teams who do move to various kinds of intense Impact concerns (high on Stages 4,5 and 6). Additionally, there is team-by-team and individual variation in the nonuser profiles.

Implications for Teacher Training

From these sample SoC data, several implications for inservice teacher training can be drawn. First, it is clear from sample after sample with innovation after innovation that nonusers of an innovation have their most intense concerns on Stages 0, 1 and 2. They are most concerned about having general descriptive information about the innovation (Stage 1) and the implications that the innovation has for them personally (Stage 2). Further, they are not as concerned, relatively speaking, about the impact of the innovation upon students (low intensity in Stages 4, 5 and 6).

Analysis of these SoC profiles would suggest that inservice training for nonusers should address those initial informational needs and personal concerns, perhaps by presenting general descriptive information about the innovation and by describing how the innovation will impact them personally. For instance, potential users should be told the time it will take and what they will have to give up if they are going to use it. Additionally, their supervisor should show that use is her/his priority.

Analysis of these profiles would further suggest that the change facilitator should downplay the consequences of the innovation for students. Nonusers are naturally somewhat concerned about the implications of an educational innovation for students but are more concerned about what the innovation means for them. Thus, the often heard administrator's statement, "You should do this because it's good for kids" is not addressing the concerns that the typical nonuser has. Further, it is hypothesized that this type of proclamation may further arouse personal and informational concerns in the nonuser rather than facilitate their resolution.

On the other hand, it appears that for first, second and third year users of teaming, Management concerns remain high. Thus, teacher training should be targeted toward these Management concerns. In the field sites where these data were collected, very little or no inservice support had been provided to the teachers implementing teaming. Thus, it appeared that in school after school, that teachers were left on their own to "discover" how to most efficiently organize and operate their teams. Since teaming is a process innovation, it does not have clearly defined products that can simply be plugged in. Rather, users of teaming need to develop process skills, both as individuals and as teams. To accomplish this through the discovery approach or on-the-job training would surely require an extended period of time. It should not be surprising that a great deal of time would be lost through inefficiencies. Comments, such as "We never seem to get even simple decisions made" and "I have to do all my planning at night because our team planning time is consumed in administrative tasks," were frequently heard. We hypothesize that first year users of teaming, and in these samples, second and third year users as well; i.e., those whose Management concerns are high, would benefit from an Organizational Development (OD) workshop on agenda setting, decision making and other basic teaming or group process skills.

Interestingly enough, this same workshop would likely provide too much detail to the nonuser. The nonuser wants more general descriptive information and information about potential personal implications, not all the nitty-gritty detail that the Management-concerned user wants. In a concerns-based implementation, the OD workshop on agenda setting would probably not be provided to teachers until their Management concerns were more intense than their self-concerns, which does not appear to occur until actual use of the innovation has gotten underway.

LEVELS OF USE OF THE INNOVATION

The second key dimension for assessing people as they are involved in change is Levels of Use of the Innovation (LoU). The SoC dimension focused on the individual's perceptions, feelings and motivations about the innovation, while the LoU dimension focuses on what she or he actually does. With LoU, the focus is on the individual's behavior and performance with the innovation.

Eight different Levels of Use have been identified and operationally defined. The operational definitions for the overall levels are presented in Figure 4 along with decision points which have been developed to make clear the demarcation between the levels. Full operational definitions of the Levels of Use are developed and described elsewhere (Hall, Loucks, Rutherford & Newlove, 1975).

Levels of Use begin with the individual "Orienting" her/himself to the innovation. The individual is actively engaged in looking over and reviewing materials, attending orientation workshops, examining the innovation and considering its use.

Usually, initial use of the innovation begins at a "Mechanical" Level of Use. At this time, use of the innovation is somewhat disjointed, with the user hanging on to the user's guide. A great deal of time is spent on logistical-management kinds of activities. Problems may arise, and must be dealt with. Printed materials may not arrive on time. The crickets may die before the science lesson is completed.

Figure 4

Levels of Use of the Innovation

LEVELS OF USE	DEFINITION OF USE
0 NONUSE	State in which the user has little or no knowledge of the innovation, no involvement with the innovation, and is doing nothing toward becoming involved.
Decision Point A	Takes action to learn more detailed information about the innovation.
I ORIENTATION	State in which the user has recently acquired or is acquiring information about the innovation and/or has recently explored or is exploring its value orientation and its demands upon user and user system.
Decision Point B	Makes a decision to use the innovation by establishing a time to begin.
II PREPARATION	State in which the user is preparing for first use of the innovation.
Decision Point C	Changes, if any, and use are dominated by user needs.
III MECHANICAL USE	State in which the user focuses most effort on the short-term, day-to-day use of the innovation with little time for reflection. Changes in use are made more to meet user needs than client needs. The user is primarily engaged in a stepwise attempt to master the tasks required to use the innovation, often resulting in disjointed and superficial use.
Decision Point D-1	A routine pattern of use is established.
IVA ROUTINE	Use of the innovation is stabilized. Few, if any, changes are being made in ongoing use. Little preparation or thought is being given to improving innovation use or its consequences.
Decision Point D-2	Changes use of the innovation based on formal or informal evaluation in order to increase client outcomes.
IVB REFINEMENT	State in which the user varies the use of the innovation to increase the impact on clients within the immediate sphere of influence. Variations are based on knowledge of both short- and long-term consequences for clients.
Decision Point E	Initiates changes in use of innovation based on input of and in coordination with what colleagues are doing.
V INTEGRATION	State in which the user is combining own efforts to use the innovation with related activities of colleagues to achieve a collective impact on clients within their common sphere of influence.
Decision Point F	Begins exploring alternatives to or major modifications of the innovation presently in use.
VI RENEWAL	State in which the user reevaluates the quality of use of the innovation, seeks major modifications of or alternatives to present innovation to achieve increased impact on clients, examines new developments in the field, and explores new goals for self and the system.

Later on, use moves on to a "Routine" kind of use, where the user has the systems worked out and has a way to work with the innovation that is unchanging. Other users, however, move on to various types of "Refining" of their use of the innovation, making adaptations in the innovation and in their use of the innovation with the intent of increasing impact on clients. Again, the focus of LoU is on describing in behavioral terms what the individual is doing with the innovation.

LoU Research

During the last three years, we have explored the Level of Use concept extensively. Initial research activities involved the development of a measurement procedure for assessing Levels of Use. A focused interview procedure has been developed (Loucks, Newlove & Hall, 1975). The interviewer uses a branching format to probe the subject regarding her or his use of the innovation. Based on the information gathered in the interview and the operational definitions and decision points of LoU, the individuial is rated on overall Leval of Use and in seven categories that represent a more detailed breakdown of each of the levels. To verify the existence of the Levels of Use, the LoU interview has been applied in a series of cross-sectional and longitudinal studies in both school and college settings using a variety of process and product innovations. The findings from these research studies have verified that the eight different Levels of Use can be found in practice.

However, the distribution of individuals across the levels is not equal. Figure 5 represents a summary of the cross-sectional samples from two studies. One study was of teachers involved in teaming in elementary schools and the second study was on the use of instructional modules by college and university faculty. These samples were initially selected according to years of experience with the innovation and Levels of Use interviews were then conducted.

In both samples (see Figure 5), the largest proportion of individuals is at the IV A Routine level. It appears that most individuals who implement an innovation reach Level of Use IV A and remain there. Further analyses of this level have indicated that there are probably three types of IV A's. The first type is the mechanical user (LoU III) who is resting after having "made it" to Level of Use IV A. Another kind is the refining IV A who has just completed implementation of a refinement or adaptation of the innovation and may be resting from this refining activity. Finally, there are the "career IV A's" who appear to be unchanging IV A users of the innovation.

Figure 5

Percentage of Distribution of
Overall Level of Use for Individuals
Involved in Cross-Sectional Studies of Two Innovations

Fall, 1974

LEVEL OF USE	STUDY OF TEAMING IN ELEMENTARY SCHOOLS N = 371	STUDY OF MODULES IN TEACHER EDUCATION INSTITUTIONS N = 292
O	7%	10%
I	9%	31%
II	3%	9%
III	19%	8%
IVA	52%	22%
IVB	6%	11%
V	3%	8%
VI	2%	2%

Another analysis indicates that 60% to 70% of the first year users of an innovation are likely to be at the Mechanical Level of Use. The number of mechanical users decreases as years of experience with the innovation increase.

Analyses of longitudinal data suggest that movement in LoU is not lockstep all the way through. Individuals do not start at Level of Use O and sequentially move all the way to LoU VI. The movement from LoU O to LoU IV A does appear to be more sequential. Above LoU IV A, however, individuals may skip level IV B or V and move directly to VI or they may move in one of several combinations. Further, it appears that once LoU IV A is reached, it appears that movement is more dependent on factors beyond control of the individual. That is, the organizational context appears to play a greater part, as does the role of the unit manager or principal.

Implications of LoU for Training

Implications for inservice teacher training that can be drawn from Level of Use are several. For example, the LoU III Mechanical User is in greatest need of the "how to do its" of getting the logistics and coordination of the innovation under control. She or he is probably not going to be interested in philosophical discussions or workshops dealing with more esoteric topics, such as criterion-referenced evaluation of the innovation or a summative evaluation of the innovation.

Another point that the teacher educator as well as the evaluator should acknowledge is that one cannot assume that all of the individuals within a school or a college are in fact "users" of the innovation or treatment. Unless it has been clearly documented, the opposite is probably true. In one large scale evaluation study (Hall and Loucks, 1977), we found that 20% of the teachers who were supposedly using the innovation were, in fact, nonusers. In the comparison schools that were assumed to contain nonusers, 49% of the teachers were, in fact, using the innovation. Staff developers and evaluators who take for granted that they have "pure groups" of users and nonusers may run the risk of no significant differences and low outcomes from their training sesions if they do not closely assess the exact Level of Use of the individuals with whom they are working.

Another implication that appears to be clear from the LoU data, as well as the SoC data, is that individuals involved in using an innovation are not apt to work collaboratively (LoU V) until after they have their "own house" in order. Each individual must master use of the innovation personally, in her or his own context (classroom) before becoming active in collaborating with colleagues. This hypothesis leads to the suggestion that inservice teacher training should, perhaps, be designed differently, depending upon the long-range goals and requirements of the innovations. If collaborative use of the innovation is required initially, then the inservice training may need to include a "teaming" component. On the other hand, if collaborative use of the innovation can be deferred, then the inservice training might be stepped or phased according to the movement of Levels of Use. Each of the users could get their individual use of the innovation in order before they are encouraged to work with colleagues in coordinating use.

INNOVATION CONFIGURATIONS

Stages of Concern and Levels of Use provide two key ways of describing and understanding the individual involved in change. This third dimension focuses on the innovation. As innovation developers are well aware, the innovation is "adapted" and quite often drastically mutated as it is implemented. In fact, a great deal of thought has been given to this by diffusion researchers (Rogers and Shoemaker, 1971); (Berman, McLaughlin, Bass, Pauly & Zellman, 1977).

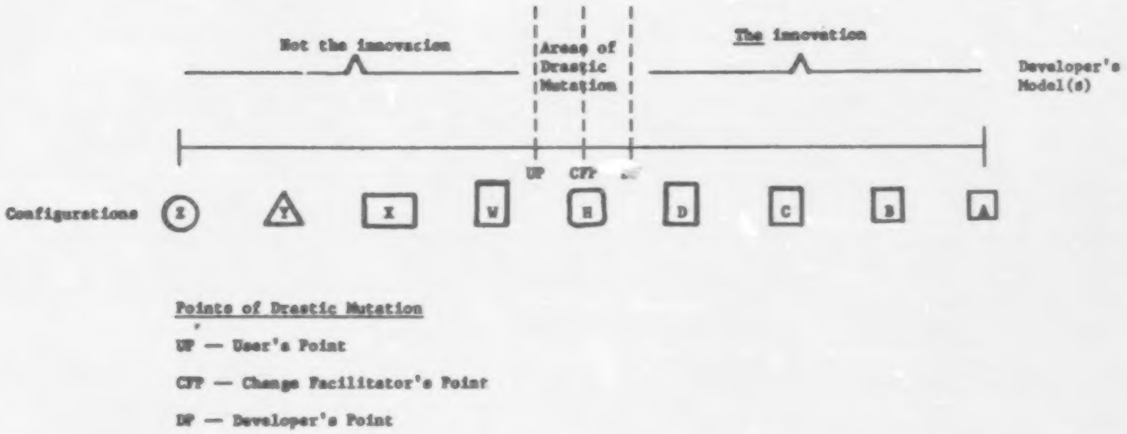
Although the name may remain the same across the classrooms and across school sites, what is actually being done in different locations may differ dramatically. In many cases, these may be alternate forms of what the developer had in mind, while in other cases the variations may be altogether unacceptable forms of the innovation. A part of our present research is focused on analyzing innovation adaptation. We are developing a concept we call innovation configurations and a procedure for determining innovation configurations.

One way to illustrate the concept is to think of driving a car as the innovation. The SoC dimension of the CBAM describes the perceptions, motivations and feelings that one has as she or he adopts, implements and institutionalizes driving a car. The Levels of Use dimension describes the driver's performance from early Mechanical use, with grating gears and bumpy starts, to the Routine LoU IV A user's focus on the entire trip without a great deal of thought to the driving, to the refining driver, on the other hand, who is making refinements to increase gas economy or driving proficiency. Innovation configurations, on the other hand, describe the kind of car that is being driven. The car should be a Volkswagen, Ferrari, or Ford. On the other hand, it could be a bicycle.

A continuum can be visualized, as is illustrated in Figure 6, along which these various "innovation configurations" exist. At the extreme right is a description of the developer's model of the innovation. The developer's model entails all of the requirements and enhancements of operationalization of the innovation that the developer has in mind. A continuum then extends from the developer's model toward greater and greater adaptations and changes in the innovation, to some point (DP) where the developer insists that the mutations are so drastic that what is being used (driven) is not the innovation.

Users and change facilitators may not agree with the developer's use/nonuse point. They often set other points as the point beyond which the innovation is no longer in use. What happens, in reality, is that the developer, change facilitators, and users do not agree on the point of drastic mutation. Instead there is an area or zone of drastic mutation within which some individuals will say that the innovation is operationalized and other observers will deny that the innovation is present.

Figure 6
Innovation Configuration Continuum


Not the innovacion
Areas of Drastic Mutation
The innovation
Developer's Model(s)
UP
CFP
Configurations
Z
Y
X
W
H
D
C
B
A
Points of Drastic Mutation
UP — User's Point
CFP — Change Facilitator's Point
DP — Developer's Point

Innovation Configuration Research

There are several aspects to research on the concept of innovation configurations that are presently underway at the Texas R&D Center. One is an attempt to clarify and describe the concept of innovation configurations. Another aspect of the research focuses on the determination of configurations through the use of a "configuration hunt." At the beginning of the Levels of Use interview, an attempt is made to determine which of many configurations a particular person is using. Then it must be judged whether or not that configuration represents use of the innovation or not. Based upon a series of interviews, configuration checklists have been developed for several innovations. These checklists identify key components of the innovation and variations within each of these components. From analyses of checklists filled out by interviewers and users and nonusers of the innovation, it is possible to identify dominant patterns or dominant configurations that occur across many classrooms.

Implications for Training

For the inservice teacher trainer, the concept of innovation configurations poses several questions. For example, has the innovation developer fully defined the operationalization of the innovation to the point where the change facilitator and the users can be reasonably articulate and confident about the presence or absence of the innovation? Are there alternate acceptable configurations? If there are alternate acceptable configurations, which one or ones of these will the change facilitator be attempting to implement? Or if it is an innovation bundle, such as competency-based teacher education or Individually Guided Education (Wisconsin R&D Center), should certain components of the innovation be implemented initially and, with subsequent cycles of use, other components of the innovation added? Further, it's conceivable that inservice training might best be targeted toward specific innovation components, such as the organizational structural components, in earlier training, and the philosophy and subtleties of the innovation emphasized in much later training.

An interesting set of questions can also be raised for the evaluator and the developer. All too often, developers' written statements do not describe exactly what the innovation is like when it is operational. As a consequence, change facilitators and inservice teacher educators have difficulty in facilitating implementation. Also, it is difficult for the evaluator to know whether or not the configurations that are "in use" are in fact acceptable forms of the innovation. Further, implementors cannot determine whether the outcomes of evaluation studies were obtained from very pure configurations of the innovation or from adulterated configurations. Replicability of the study may be seriously affected.

AN EXAMPLE OF A CONCERNS-BASED INSERVICE TEACHER TRAINING PROGRAM

Now it is time to briefly illustrate how the concepts of Stages of Concern, Levels of Use, and Innovation Configurations can be combined into a concerns-based inservice training program. Presently, the Texas R&D Center is halfway through a two and a half year concerns-based implementation study in a large suburban school district (N=80 elementary schools). The implementation involves teachers in grades 3 through 6. The innovation is a revision in the science curriculum. In the past, teachers have taught from some of the packaged science curricula that were nationally developed in the 1960's.

The revision of the science curriculum has entailed development of a Teacher's Guide that incorporates specific activities out of several of the packaged curricula (e.g., Elementary Science Study Units and Science Curriculum Improvement Study Units), as well as values education, outdoor education, environmental education and some health activities. The materials have been combined into one large notebook referred to as the Teacher's Guide. The Teacher's Guide has been designed to address SoC 3 and LoU I-III issues. The how to do its of teaching are included, with information on where to locate the materials and organisms, how to order films, and what backup references the teachers can access.

The curriculum materials and the Teacher's Guide were developed and field tested within the school system. At the time that the Texas R&D Center became involved, the staff developers and the science consultants for the school system had completed field testing and were designing their plan for implementation of the science curriculum throughout the 80 elementary schools.

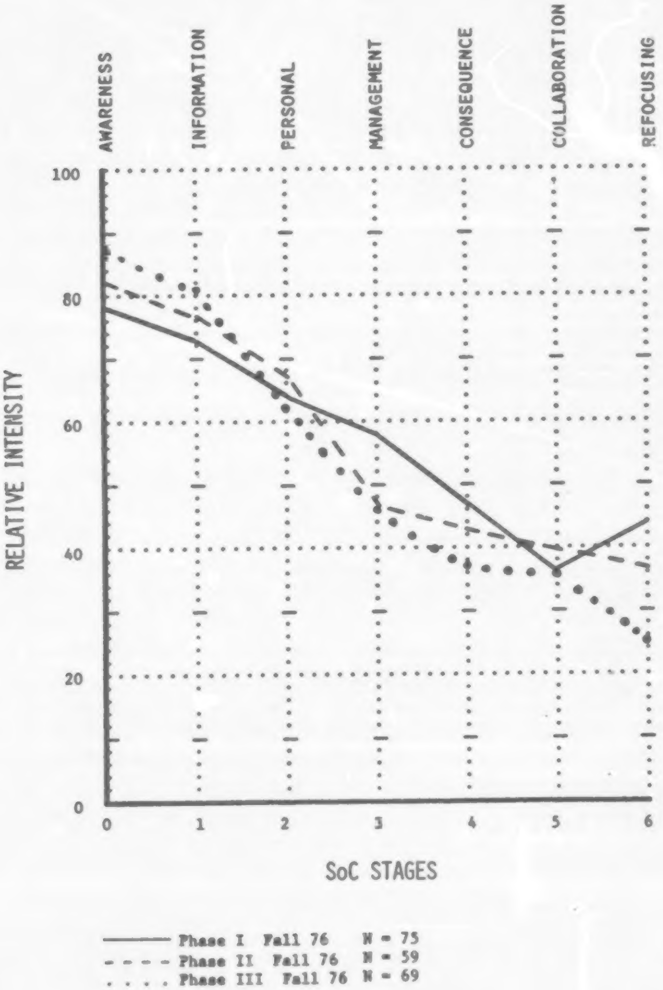
Their initial thinking had been to use three released-time inservice days placed fairly close together early in the fall of a school year. The inservice activities were of a good design and included the kinds of activities that science education in the last ten years has emphasized. The sessions would have teachers participate in student activities, introducing them to the various materials, science content, and experiencing the science units. Model lessons and direct handling of materials as a part of the teacher inservice activities would be done, and experienced inservice teachers would use it in the training. In general, the planned experiences are consistent with a concerns-based approach, except the pacing. As a collaborative effort developed between the school system staff and the staff of the R&D Center, the implementation game plan was adjusted based on SoC, LoU, and configuration data that were collected within the school system. In the following paragraphs, some of the aspects of the concerns-based implementation plan that is being used will be described and some data that have already been collected will be presented to illustrate initial findings.

One of the first changes in the implementation plan that resulted from the concerns-based influence was to stretch out the time between each of the released-time inservice days. In fact, rather than accomplishing the inservice training before the school year started or within a six-nine week period, the inservice period was stretched over a year and a half. The reason behind this change was that the concerns of the teachers would not develop, within six weeks, from high Informational and Personal concerns to high intensity Impact concerns. Rather, it would take at least one to two cycles of use to resolve Management concerns and to move toward Impact concerns. By spreading out the inservice training days, more concerns could be addressed.

A second decision that was made early in the collaborative effort was to clarify the goal of the implementation effort. The school system had a choice, designing interventions to strive either for a proportion of the teachers teaching science at a high quality (Impact concerns, ideal configuration) or for all teachers simply teaching science. It was not conceivable that both goals could be accomplished with the same inservice training plan, as the content of the inservice training would be quite different. The school system's decision was to have "all kids receiving science instruction."

Figure 7

Science Study SoC Profiles Before Inservice



Based upon the initial assessment of Stages of Concern about the revised science curriculum (see Figure 7), it was decided that the Informational (SoC 1) and Personal concerns (SoC 2) needed to be addressed first. It was also clear that personal concerns were not particularly high, especially for nonusers. Thus, the emphasis was first placed on addressing informational concerns. The training activity selected was a small group, one hour after school, "pre-inservice" meeting. At this pre-inservice meeting, the teacher from two schools met with one of the science consultants and were introduced to the schedule and planning of the inservice days and received their Teacher's Guide. General questions were answered and the emphasis was placed upon general descriptive information about the curriculum and anticipation of Personal and Management concerns.

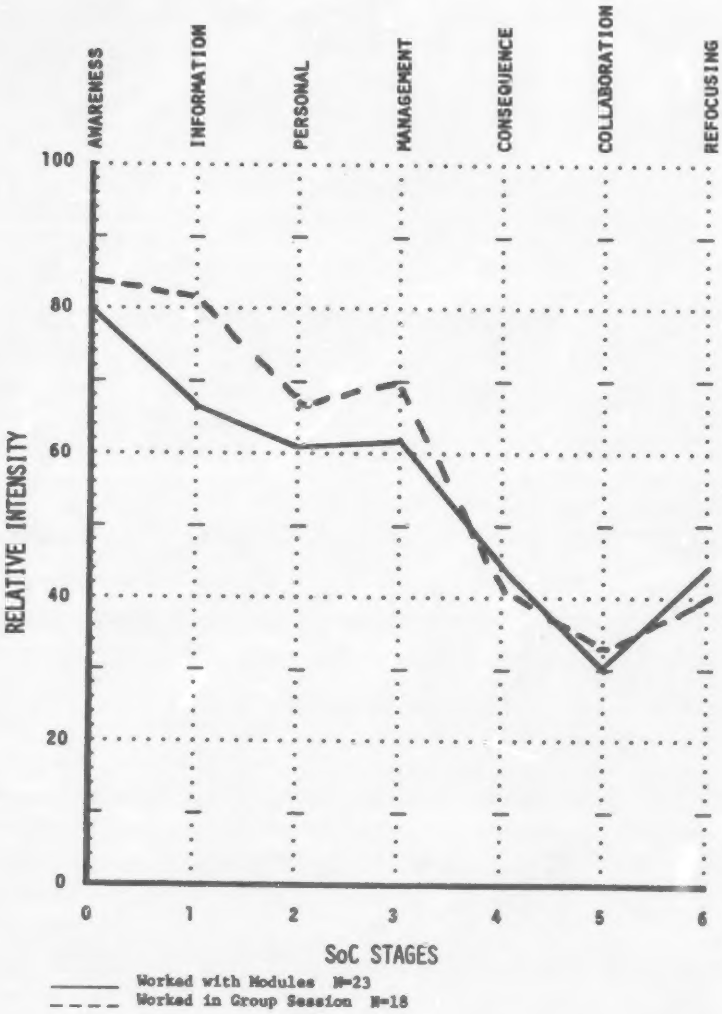
Since there were teachers in the school system who had been involved in field testing the innovation in its draft form and because the Science Department and staff developers felt that there were many other teachers who were already highly proficient in the teaching of science, it was anticipated that most teachers attending the inservice days would have Management concerns and that some would have Impact concerns. Also, the inservice days would be attended by forty to sixty teachers at a grade level. For these reasons, the inservice days were designed with two tracks. One option was designed to address teachers with more intense Management concerns and the other route for teachers who had more intense Impact concerns.

The route that was hypothesized to be more relevant to teachers with intense Management concerns entailed face-to-face, continuing involvement with Science Department staff and the use of inservice teacher leaders. The content of these sessions placed a great deal of emphasis on the nitty-gritty and how to do its of teaching the science units. The alternate route that was targeted toward Impact-concerned teachers entailed self-paced modules dealing with such content areas as "wait time" in teaching behavior, Piaget, learning theory, and conducting outdoor education classes. These modules were designed to allow teachers to work individually and in small groups without constant trainer supervision.

As a part of the research effort, we have been documenting the concerns profiles of the teachers and identifying the routes they select in the inservice days. The concerns profiles for one of the workshops is presented as Figure 8. As was hypothesized, those teachers with higher Personal and Management concerns (SoC 2 & 3) stayed in the large group with the face-to-face contact and the how to do it content. Those teachers who had lower Personal and Management concerns chose instead to move with the more independent, Impact-content, modular route.

Figure 8

Phase I Grade 3



Another aspect of the implementation plan has entailed dividing the school system into thirds and moving one-third of the teachers at a time through the inservice sequence. Thus, it has been possible to learn from the first phase, things that need to be refined and adjusted for the second phase of teachers as they moved through, and, subsequently, for the third phase of teachers as they are moving through. This allows for repeated applications of our research design. As another part of the research, Levels of Use is being assessed twice during each academic year on a representative sample of each phase. At the present time, three assessments of Levels of Use have been made and are presented in Figure 9. It is clear from the Levels of Use distribution that as each third, or phase, has become involved in implementation, the number of users of the innovation has increased, as would be expected. Also, as one would expect from theory, the incidence of Mechanical level users is relatively high; the Routine users are high number; and the incidence of Levels IVB, V and VI is very low or nonexistent for first year use. Some higher LoU's appear to be coming in the Phase I schools in the second year.

Figure 9

OVERALL LOU DISTRIBUTION BY PHASES

LOU (IN PERCENTAGES)

		0	I	II	III	IVA	IVB	V	VI	N
PHASE I	FALL '76	5	9	83	1	1	0	0	0	75
	SPRG '77	0	4	10	53	24	7	1	1	74
	FALL '77	3	3	5	38	35	0	13	3	63
PHASE II	FALL '76	53	3	17	5	17	5	0	0	60
	SPRG '77	7	5	43	19	21	3	0	1	58
	FALL '77	4	11	11	40	23	6	4	2	53
PHASE III	FALL '76	80	15	1	3	0	0	0	1	69
	SPRG '77	66	3	24	6	0	0	0	1	70
	FALL '77	12	16	63	4	6	0	0	0	51

This potentially low level of Refining the LoU individuals is now raising another set of inservice training questions - Is LoU IV A an acceptable level at which to end implementation support (i.e., inservice teacher training)? What will happen to the configuration of the innovation if the Level of Use of the individuals is left alone? Will they continue using the present configuration, which our assessment indicates is a minimally acceptable configuration? Or will there be movement toward desired Impact-related refinements in the configuration, or movements away from acceptable configurations altogether? These and other questions are presently being grappled with in our collaborative effort.

The one clear hypothesis that there seems to be agreement on at this time is that the consensus goal for the implementation effort, i.e., all teachers teaching science/all kids receiving science, is being reached. However, the second goal, having high quality configurations of science teaching, is not being addressed by the present implementation effort. Thus, it appears that a second round of inservice training might be in order. That round of inservice training would have to have a different game plan and targeting. It appears that the unit of intervention will need to shift from the individual teacher. From other configuration research, it appears that the unit manager, i.e., the principal, plays a key role in setting configurations within the school. Therefore, for Refining LoU's and Impact SoC, we are hypothesizing that the school building must be the unit of intervention.

A policy question that arises for the school system at this point is whether or not the school system is responsible or should take on the responsibility of Refinement-oriented staff inservice training, and, if the school system does, should this be mandatory training or should it be optional? If it is optional, can we expect the individual at LoU IV A/low intensity Impact concerns to attend? Probably not. These and other questions are presently being grappled with in this collaborative effort which has been an exciting one for the practitioners, the teacher educators, and the researchers.

CONCLUSION

In conclusion, it might be best to summarize a few key principles that seem to fall out from our research with the Concerns-Based Adoption Model. These are, in many ways, just brief summaries of what has been discussed above, but may add further perspective on concerns-based inservice teacher training.1. Be sure to attend to persons as well as the innovation technology.

There is an affective or personal side to change. Too often it appears that change facilitators and teacher educators become all-involved in the technology of the innovation and forget to attend to the persons that are involved.

2. It is okay to have personal concerns.

Personal concerns are a very real part of the change process and they need to be acknowledged and recognized as a legitimate kind of concern to have. It is the responsibility of change facilitators to attend to these concerns or else the individual is not apt to be able to resolve these and to move on to having Impact concerns.

3. Don't expect change to be accomplished overnight.

Since change is a process, entails developmental growth, and is a learning experience, it will take time. The managers of the change process and the designers of teacher training activities need to acknowledge and anticipate that change is a process and adjust their training activities accordingly. It would also be very helpful if policy decision makers become aware of this fact and stop assuming that their decrees and mandates will result in instantaneous cures out in the field.

4. There is not a lot of glamour in implementation.

The glory in relation to change comes at the front-end and at the end of the long run. But in the middle, where all the struggle is, there is a great deal of hard work with little immediate pay-off. The glamour usually comes with the front-end flag waving, announcements, and proclamations. Attempting to resolve Personal and Management concerns and to facilitate each individual's move into and beyond a Mechanical Level of Use requires a great deal of time and energy. Individual consultation, hand holding, cajoling, answering the same question over and over while keeping in mind where it is all supposed to be going is a hard and highly skilled job. The pay-off from these implementation efforts does not come until the point, down the road, when one can observe an individual or an entire staff that has developed a new capacity and has fully internalized use of the innovation. Unfortunately, it appears that for all too many, the front-end flag waving is all that they have time for.

In this paper I have described some of our attempts to develop a deeper understanding of the change process as it is experienced by individuals. With the Concerns-Based Adoption Model as the conceptual framework, several dimensions that can be used for diagnosing where individual teachers are as they are involved in implementing various innovative practices and for planning inservice training have been described.

The paper began with descriptions of several assumptions; perhaps it is worthwhile to end the same way. There is another assumption underlying the CBAM that is probably apparent. Change in education should be a positive and worthwhile growth experience. In education, we have very few really bad innovations; there are many very good innovations that have not seen the light of day. When change goes wrong, it is more than likely the change process that went wrong, not the innovation, the developer, change facilitators or individual users.

To add final commentary on this assumption, a quotation from the American humorist, Will Rogers, is in order: "Even if you are on the right track, you will get run over if you just sit there."

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Lessons from the Literature on Implementation

William J. Kritek

In 1970 Goodlad and Klein reported on observations made in more than 150 classrooms in 67 schools in 26 school districts. The observers were looking for instances of educational reform in practice. What they found was both disillusioning and disappointing.

> A very subjective but nonetheless general impression of those who gathered and those who studied the data was that some of the highly recommended and publicized innovations of the past decade or so were dimly conceived and, at best, partially implemented in the schools claiming them....It is clear...that a substantial number of principals and teachers perceived ongoing instruction to be characterized by some of our 'reasonable expectations' when members of our staff did not. They claimed individualization of instruction, use of a wide range of instructional materials, a sense of purpose, group processes, and inductive or discovery methods when our records showed little or no evidence of them.[1]

The issue raised by the Goodlad and Klein study, an issue at the very heart of educational reform, has to do with the implementation of educational programs. Put simply, it deals with the fate of proposals for educational innovation when attempts are made to put these proposals into practice in real-life settings. Judging by the complaints of cynics (and realists) regarding the paucity of actually functioning innovations, the problems of implementation are well known. Yet the literature dealing with implementation has, until recently, been almost nonexistent. Complaints and frustrations have not been transformed into serious efforts to define the problems associated

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with the implementation process or to pinpoint the variables responsible for the success or failure of program implementation.

The dearth of literature on the implementation process is not peculiar to education; the social sciences, more generally, are plagued with the same deficiency. Pressman and Wildavsky note the rather peculiar situation of a crucial process largely ignored by researchers.

> There is (or there must be) a large literature about implementation in the social sciences-or so we have been told by numerous people. None of them can come up with specific citations to this literature, but they are certain it must exist. Surely, they will say, the vast scholarly attention paid to poverty programs and efforts to secure compliance in the field of civil rights has generated work on problems of implementation. It must be there; it should be there; but in fact it is not....Everyone is aware, certainly of the widespread concern about the inability to implement governmental programs. Nevertheless, except for the few pieces mentioned in the body of this book, we have been unable to find any significant analytic work dealing with implementation.[2]

The work of Bennis, Benne, and Chin is illustrative of the attention paid to the implementation process. While claiming that their emphasis is on the "processes of planned change, on how change is created, implemented, evaluated, maintained, and resisted," the implementation phase is actually shortchanged.[3] To be sure, aspects of the implementation process are dealt with in various sections, especially in the chapters entitled "Instrumentation" and "Resistance." Nowhere, however, is the process examined in its own right and in a detail commensurate with its inherent problems or the centrality of its importance.

In the last four or five years researchers have begun to pay explicit attention to the implementation process itself. One strand of this research has been pursued by students of planned organizational change. Working from a social-psychological perspective, these researchers have moved beyond a preoccupation with the diffusion and adoption of innovations and have focused on "the small and mundane as well as the large and important issues and problems necessary for idealistic practitioners to carry out their dreams."[4] A second strand, using a political science perspective, has been concerned with the problem of securing compliance with federal laws and regulations and with the problem of translating governmental policies into workable programs. A third strand has grown out of attempts to evaluate innovative educational programs. Evaluators have come to realize that programs cannot be faulted for failing to achieve intended outcomes if, in fact, they have not been successfully implemented.

This paper is an attempt to cull the major implications from a number of these studies in order to aid those responsible for program implementation and to provide a framework for future research. The studies will not be reviewed one at a time. Rather, the research findings will be grouped in terms of factors that influence the implementation process: program goals, planning, resources, user roles, administration, and an "other" category that focuses on unanticipated developments that may occur during implemention.

GOALS AND THE IMPLEMENTATION PROCESS

One of the more obvious problems facing implementors is the tendency of policy makers and program planners to write vague and abstract statements of a program's goals and of the means towards those goals. In their study of the innovative Kensington School, Smith and Keith note that the "formal doctrine" which spelled out the entire structure of means and ends was marked by a high degree of abstraction. "Individualized instruction," for example, was never given an operational definition.[5] Besides making it impossible to decide whether implementation had taken place or not, the abstract doctrine at Kensington led to varying (and legitimate) interpretations of the program's ends and means. In turn, these varying interpretations led to staff conflict. In this connection, Charters and Pellegrin point to "the fallacious assumption that a statement of general, abstract program values and objectives will easily be translated into new and appropriate behavior patterns at work."[6]

Besides the inability of abstract goals (and means) to function as a guide for action, such statements also make it impossible for potential program participants to make an informed decision on whether to participate or not. The teachers who agreed to participate in the differentiated staffing experiment at Stormy Heights, as reported by Reynolds, quite literally did not know what they were getting into. Consequently, they were not ready for, nor reconciled to, the changes in staff roles and instructional activities that were necessary to make differentiated staffing a reality.[7]

The fact that "teachers never obtained a clear understanding of the innovation," is identified by Gross, Giacquinta, and Bernstein as the first major barrier to the implementation of a new role model for teachers at the Cambire School.[8] That an early clear statement of ends and means is essential is supported by the authors' observations that the administrators made only minimal efforts subsequently to clarify the innovation and the teachers themselves did not communicate their own lack of clarity about the catalytic role model.

In addition to the tendency to state program means and ends in vague and abstract terms, there is also the tendency to set up ambitious goals for new programs. In her study of the New Towns In-Town, Derthick lays part of the blame for the program's failure on the fact that the objectives stated by federal officials were so ambitious that some degree of failure was inevitable. The goals, in fact, were embellished by HUD over those originally stated by President Johnson. Race and class integration, an added objective, became a problem in the eyes of some local communities. Especially because of limited influence at the local level, the government's "impossibly high objectives . . . exceeded by far its capacity to achieve them." The inflation of goals was due, in part, to a desire to launch demonstration projects. In fact, the consultant chosen for the pilot attempt to set up a new town in the District of Columbia was chosen specifically to design a program that could be a model for the country.[9]

In their study of performance contracting, Carpenter-Huffman, Hall, and Sumner point out that competition among firms to sell untested products becomes a "perverse incentive to inflate aspirations." Those who want change, on the other hand, "succumb to the lure and follow the doctrine of maximum plausible optimism."[10] The opposite can also happen. According to House, when innovations are oversold, "nonbelievers begin to focus on the gap between the promises made for the innovation and its performance and begin to label its propagators as medicine men or charlatans."[11]

Whether goals are stated clearly and realistically or not, there will inevitably be some conflict over goals. Murphy points to the "covert disagreement over the relative importance of Title I's several purposes" as a contributing cause to the nonimplementation of Title I.[12] Such disagreement need not be covert and it need not be viewed as something sinister. Any program will involve a number of participants who will have various preferences which must be taken into consideration. Pressman and Wildavsky take for granted the conflict over goals but downplay its significance. They note that it is tempting to presume that participants disagree about specific program goals when programs are not being implemented. However, the means to those objectives are usually the cause of disagreements and outright quarrels. The means are much more tangible and evident while the "ends are always around the corner."[13] Working through the disagreements will demand either the reliance on some type of power or a process that arrives at some form of consensus. Either way, program implementors must realize that the conflict is there to work through, and that the working through process will not be easy.

Program implementors must also be prepared for the changing of goals with the passage of time. The early objectives of the Model Cities program in East St. Louis, according to Judd and Mendelson, were hardly recognizable at a later point in time.[14] In part, the change is due to adaptation and adjustment to the interests of participants. According to Derthick, federal programs often "work" at the local level because some adjustment has been made between the federal program and local interests. The New Towns In-Town program failed, says Derthick, precisely because it did not make the necessary compromise with local interests. Program developers, therefore, must be ready to adapt their program to the environment if any implementation is to be expected. In like manner, evaluators miss the point if they insist on assessing a program's accomplishments against its early statement of objectives.

PLANNING AND THE IMPLEMENTATION PROCESS

A second factor that influences the implementation process is the planning that precedes the actual implementation of a program. Typically, programs get off the ground with a minimum of planning. A school superintendent is quoted in Wilson's study of the implementation of performance contracting in Gary, Indiana:

> Now one of the decisions we had to make, of course, was should we go for broke and see if we could start this fall, or should we wait for another year, because we were still in the spring and a lot of planning still had to be done. You can sit and plan it, for a long time, and try to anticipate as many bugs as possible. That's one approach to take. Another approach is to say, well, you have to do some planning, but let's get going on it-let's get the bugs and work them out by experience rather than on paper.[15]

The dilemma was resolved in favor of the latter approach, and the bugs eventually led to termination of the program.

Charters' study of the implementation of differentiated staffing also points to a lack of planning. The district's plans for its differentiated staffing project were "relatively silent" on the events that should take place after the opening of school.[16] Lauter, in his account of the "Short, Happy Life of the Adams-Morgan Community School Project" in Washington, D.C., cites a general feeling of "let's get started and we'll find out just what we're doing as we go along."17 An overwhelming urgency to put the project into operation "immediately or sooner" led to a rejection of the idea of a year of planning or for starting with a smaller experiment.

The tendency to slight the planning process is, of course, not limited to educators. Derthick lays the blame for faulty planning of the New Towns In-Town program at the door of the White House. Her account is of a hastily organized program consisting of exactly one weekend of staff work. She concludes by saying: "Had President Johnson been a more patient and methodical man, the program could have been planned more carefully and would have had a better chance of being founded on workable assumptions."18 Casselman's account of the failure to implement a PPB system in Massachusetts includes, as one of several causes, the fact that it was introduced without much preparation.19

At issue here is not so much a total lack of planning as a faulty notion of what should be provided for in program planning. Specifically, planning that stops short of forging the link between program objectives and actual practice is defeating its own purpose. In his study of a school system's attempt to convert a number of schools to differentiated staffing, Pellegrin notes that the proposal contained "no detailed plans . . . for the implementation year." Almost all the planning focused on the period prior to the target date for making the plans operational."20

Sarason alerts program planners to "the necessity for anticipating problems and consequences, an activity or process notably absent or found only in diminished degree in the creation of most settings."21 Judd and Mendelson, in their attack on professional planners, point to "grandiose" visions that make no mention of any obstacles and sweep aside all practical considerations. Traditional planning doctrine, they maintain, encourages a divorce between planning and implementation. On this last point, Pressman and Wildavsky are most explicit about an important lesson learned from the EDA experience in Oakland: "implementation should not be divorced from policy."22 As they see it, the problem is to consider the difficulties of implementation during the period of policy formulation. In other words, implementation must not be thought of as a process that takes place after the design of policy but rather as a process that is interdependent with the design of policy. In order to do this Pressman and Wildavsky suggest striving for the most direct means for accomplishing objectives so as to minimize decision points and clearance points. They also recommend devoting as much attention to creating machinery for executing a program on a day-to-day basis as for launching one.

The importance of planning is underscored by the power of early events and initial experiences for shaping the subsequent direction of a program. In his study of differentiated staffing in an elementary school, Jones notes:

> At the last one-week workshop . . . the Efstutt staff decided to open school in a traditional self-contained style. The reason for this was to allow teachers and pupils to adjust to the new staff members present in the classrooms. This decision had a considerable influence on the project's subsequent implementation activities.[23]

In a sense, a program cannot escape its own early history.

RESOURCES AND THE IMPLEMENTATION PROCESS

The sufficiency of resources is a significant issue in program implementation. A major barrier to the implementation of the new teacher role model at the Cambire School, according to Gross, Giacquinta, and Bernstein, was the unavailability of required instructional materials. The innovation at Cambire demanded a rich supply of highly motivating and self-instructional materials in the classroom. In actuality, the materials available were neither highly motivating, nor unusually self-instructional. Further the authors record that eight of the ten teachers complained about the inadequate amount of curricular materials available to them when they made their initial efforts to implement the innovation.

The inadequate supply of curricular materials available to the teachers at Cambire School is typical of a type of problem that plagues implementation efforts. New programs are frequently initiated with very limited resources and tremendous demands on those resources. Both Murphy and Bailey and Mosher point to an inadequate staff as one of the reasons for problems with the implementation of Title I of ESEA.[24] Lauter also alludes to a low level of equipment and supplies and to books which did not arrive at Adams-Morgan.

The task of beginning a program takes more resources than will later be needed to keep the program running. In these days of energy shortage, those of us who drive are only too conscious of the greater resources needed to start our cars from a dead stop compared to the resources required to keep the car moving at a constant speed. Stinchcombe points out that new organizations generally involve the learning of new roles. "The process of inventing new roles, the determination of their mutual relations and of structuring the field of rewards and sanctions so as to get maximum performance, have high costs in time, worry, conflict and temporary inefficiency."[25]

When the program or innovation employs "an alternative of grandeur" strategy involving comprehensive change, the demands on participant time and energy are even more severe. In the Smith and Keith study, the totality of the changes attempted at Kensington meant that teachers had to be expending energy in many directions at once.[26] The result is the phenomenon of "burn-out," a common occurrence in the many alternative schools that begin with a vengeance and last for only one or two years because the staff cannot maintain the furious pace to which they have committed themselves. Wacaster also points to the problems that can develop when the implementation of several innovations is attempted at once. Besides the competition for scarce resources among the innovations and the fatigue that plagues the innovators, there is the possibility of a "house of cards" phenomenon. "If one innovation falls, other innovations dependent upon it may fall, in part or in toto-like a house of cards."[27]

(An alternative to the "alternative of grandeur" is illustrated by Etzioni's study of the European Economic Community.[28] His strategy of "gradualism" is similar to Gartner's and Riessman's concept of "phasing": moving from the experimental demonstrational in carefully planned steps to ever larger territory, rather than attempting to institute a new practice into the entire system at once."[29] This go-slow strategy has implications for several of the dimensions indicated in this paper.)

In his chapter entitled "The Myth of Unlimited Resources," Sarason recounts the experience of what most people considered "the most innovative community action program in the country." The program had excellent leadership and strong political and financial support. And it was in a position to get a substantial amount of additional federal money once it became available.

> Enthusiasm, sense of mission and superiority, and a vision of uninterrupted progress were among its more obvious characteristics. More subtle, however, was the impression its reports and news releases created that this truly exciting setting was adequate to meet its goals. Although in one part of their heads the leaders knew otherwise, this was never reflected in any central way in their messages to the community.

Sarason notes that, in an evaluation he made of the setting two years after its beginnings, he emphasized the possible adverse effects of not dealing realistically with the fact that it would never have adequate resources to achieve its goals. Although the program initially set out to avoid the mistakes of traditional community action programs, it eventually began to resemble what it tried to avoid.

> The departure of the leader accelerated the transformation. It was only as the war on poverty de-escalated into a skirmish that the leaders of the setting could state publicly in the most unequivocal way that the resources originally available to them had been woefully inadequate and that even if funding had been maintained on the previous level its goals could not have been reached.[30]

The problems of resource insufficiency will not be solved by more money alone. Additional dollars can buy more personnel, more time, more energy, and more materials. And, in light of the inevitable unanticipated consequences that will crop up, a resource reserve that can be tapped when needed is essential. However, "more" will not insure that the resources will be of the appropriate quality. In the Gross, Giacquinta, and Bernstein study, more of the inappropriate materials would not have helped; in the Sarason example, more personnel without the appropriate training and philosophy would not have helped. Program planners and implementors must be more realistic in setting objectives tailored to the resources available or potentially available. Alternatively, they must scale down their endeavor and commit a portion of their resources to providing for the required materials and personnel.

USER ROLES AND THE IMPLEMENTATION PROCESS

Although the high costs of learning new roles in new programs has been referred to as an issue of adequate resources, the phenomenon is important enough to require explication. Gross, Giacquinta, and Bernstein use the term "role overload" to refer to the fact that the Cambire teachers were asked to learn and carry out a new role-the catalytic role model-as well as to maintain important aspects of the traditional teacher role. The administration did not anticipate this role overload, nor did it cope with the resultant problems of fatigue and mental strain when they became apparent. Similarly, at Kensington, the redefined teacher-pupil roles and the new roles demanded by the physical openness of the school resulted in a high expenditure of time and energy on the part of teachers. Wilson also notes that the different roles demanded of teachers, students, and materials in the performance contracting experiment led to conflicts among those immediately affected and also to conflicts with the regulations and the expectations of those outside the school.

Breaking out of established patterns and learning new roles is obviously difficult. To compound the problem, the new roles required to implement a program are frequently vaguely specified in proposals and plans. The result is highly predictable.

Carlson, in his chapter on the unanticipated consequences in the use of programmed instructions, catalogued teacher strategies devised "to modify programmed instruction in such a way that it took on more of the characteristics of regular classroom instruction."[31] Similarly, Goodlad and Klein noted that "novel features seemed to be blunted in the effort to twist the innovation into familiar conceptual frames or established patterns of schools."[32] Thus, team teaching looked like departmentalization; non-grading became a form of homogeneous grouping, new curricula were conveyed with traditional methods.

House, drawing on observations of the Illinois Gifted Program and the PLATO computer-assisted instruction system, observes that teachers almost never adopt an innovation as a whole. The innovations "undergo transformation" in the attempt to fit them into the established social and political structure of the schools. Carpenter-Huffman, Hall, and Sumner refer to a "natural law of program survival"-the tendency to emphasize those elements that are most compatible with the system and to deemphasize the elements that challenge the existing order. Reynolds calls the process "assimilation to the familiar"- staff members defining their new roles in a manner consistent with past experiences, values, and norms.[33]

There is evidence, also, that administrators of innovative programs, themselves, do not always understand or act according to the role requirements of the innovation. Argyris makes this observation in his analysis of alternative schools.[34] The staff members of the Cambire school failed to communicate to administrators their lack of clarity about the new role required of them-partly because they believed the administrators themselves did not have a very clear conception of the new teacher role. This deficiency on the part of administrators is further confirmed by Charters, who singles out the lack of plans to help staff members adopt new role behavior "almost as though complex changes in role behavior and role relationships were expected to occur automatically and instantaneously."[35]

Despite the tendency to convert new programs into familiar ways of doing things, Carpenter-Huffman, Hall, and Sumner can still note: "...the ability to conduct the OEO (performance contracting) experiment at all indicates that if ingrained patterns of behavior are a barrier, the barrier is not insurmountable."[36] What is needed, it seems, is increased attention paid to spelling out, in detail, the process by which program staff will shift to new work patterns. In addition, continuous monitoring and in-service programs (beyond the usual summer workshops) are needed until new role behavior is ingrained. Finally, it must be noted that not all local permutations of widely disseminated programs should be considered perversions or corruptions. The uniqueness of local circumstances, in many cases, can best be served by some modification of the standard procedures.

ADMINISTRATION AND THE IMPLEMENTATION PROCESS

Several studies indicate that the leadership of new programs is crucial for successful implementation. Wilson's study of performance contracting points to problems that resulted because one administrator did not understand the culture of the school and other problems that were caused by a mismatch of leadership styles. The administrators at Smith and Keith's Kensington School saw their roles as statesmen; consequently, they allowed themselves to get out of touch with the realities of everyday life in the school and they neglected the handling of mundane problems. In the alternative of grandeur strategy that affects multiple components of an organization, this lack of touch with operating realities is particularly harmful, since high coordination and frequent decisions are demanded. The statesman role, plus the upside-down authority pattern, plus the stance that, given freedom, teachers should be able to perform, diminished the amount of administrative helping available to the Kensington teachers.[37]

The Gross, Giacquinta, and Bernstein study is most emphatic on the role of management in the implementation process. First of all, management is in the best position to clarify any ambiguity about the innovation in the minds of staff members.

> Further, the authority to establish training programs and provide the materials and other resources required by the innovation is lodged with management. In addition, only management has the power to make changes in organizational arrangements that are incompatible with the innovation. And it, too, is the agency that can offer the type of rewards and punishments required if the staff is to be continuously motivated to expend the time and effort required to implement an innovation. Moreover, management can most effectively handle difficulties that arise and that inhibit the development or maintenance of these conditions. For example, at Cambire managerial actions could have alleviated conditions such as teacher role overload, interpersonal strain between teaching partners, and teacher frustrations from lack of managerial support, circumstances which played an important part in the emergence, development, and congealing of staff resistance to the innovation and its sponsorship.[38]

Included in the area of administrative leadership is the ability of the program leaders to exert influence over internal and external contingencies that affect program implementation. In the New Towns In-Town program, federal officials were not able to control what happened in local politics because they had limited knowledge of it, little right to intervene, few resources with which to intervene, and limited ability to manipulate the resources they had. (To further complicate the situation, the real leader of the program, President Johnson, had difficulty analyzing the housing problem from the perspective of local officials because he was so far removed from the local scene.) This same lack of leverage of federal officials in relation to the states is cited by Murphy to explain the failure to implement Title I of ESEA.

Based on experience with the Illinois Gifted Program, House stresses the importance of an "advocate" for an innovative program. "Advocates defend the integrity of the special program, recruit members, infuse them with values, and secure adequate resources."[39] In addition, they provide access to central office staff (or the equivalent in other organizations). Carpenter-Huffman, Hall, and Sumner note the importance of the "close and committed attention: of some official who has "the professional respect of his colleagues and sufficient authority or will to overcome red tape and resistance in order to get things done.[40]

As indicated above, one of management's tasks is continuously to motivate program staff to expend the time and energy necessary for implementation. In some cases this may involve overcoming the initial resistance of staff people. More often than not, however, those who agree to work on innovative programs are initially very enthusiastic. In several of the studies considered here the level of staff enthusiasm declined with the passage of time. Judd and Mendelson report that interest in community meetings lagged, and eventually the meetings were discontinued. They identify part of the problem as attempting to evoke enthusiasm for, and a sense of identity with, goals that have been determined by higher authorities. For Bailey and Mosher, only a pervasive public understanding of ESEA's provisions and intent would have been sufficient to generate the enthusiasm and commitment necessary for effective implementation. Derthick records that the President's interest in the New Towns program waned when there was no progress to report. In turn, progress at the federal and local levels depended on the interest of the President. For Pressman and Wildavsky, an essential policy problem is: "how to provide incentives to change low to high intensity or, more accurately, how to maintain high positive intensity through lengthy delays"[41] For all but the most devoted participants, they note, intensity decays as delays grow longer.

Wilson formulates the problem of maintaining enthusiasm in the negative. Given the early euphoria of those associated with an innovation, perhaps compounded by the "true believer" syndrome, the problem becomes one of finding ways to hold down early expectations of effectiveness and early expectations of the time required to "shake down" an innovation and still maintain enough enthusiasm to achieve "take off." House also notes that, in one of the settings where the PLATO system was implemented successfully, faculty enthusiasm started out low and became higher as the year progressed. He credits this to a soft-sell, low publicity, and trimmed down promises approach plus the existence of an advocacy group that sustained enthusiasm.

OTHER FACTORS AND THE IMPLEMENTATION PROCESS

One of the oft-overlooked aspects of program implementation is the fact that programs are significantly more complex to implement than is initially assumed. Leithwood and Russell have developed a model of the implementation process from work done with programs for educational changes in Canada. They consider eight stages from the initial climate for change through full field trials of the program as well as eight components (context of change, evaluation, role of principal, etc.). The resultant matrix consists of 64 cells representing the interaction between components and stages. The authors comment: "Although the model appears excessivley complex presented in this form, it is far from an overstatement of the scope of the implementation process."42

This inherent complexity and the failure of abstract proposals to come to grips with the probable problems of implementation lead to a string of unanticipated consequences that can eventually prove to be the undoing of a program. Derthick, Gross et al., Reynolds, Smith and Keith, all attest to the unanticipated consequences that arose during program implementation. Pressman and Wildavsky devote an entire chapter to showing how unanticipated "technical details" combined to delay the EDA program in Oakland and frustrate the hopes of its sponsors. Charters identifies an unanticipated consequence that he calls the "disruption effect of innovation: the very process of implementing change, as incorporated in Efstutt's differentiated staffing project, may well have had the short-run consequences of distracting the staff from realizing the projects' long-run objectives."43 Reynolds suggests some strategies to reduce the unanticipated consequences of change. Among them are an increased involvement of management personnel during the early phases of implementation and basing a definition of the problem on an analysis of the status quo. Reynolds also recommends involving program staff in program design.42

Unanticipated consequences may be reduced by a careful planning process, but they will not be completely eliminated. Their inevitability would seem to dictate holding some resources in reserve in order to cope with them. In addition, the prospect of unanticipated consequences would seem to demand the provision of a monitoring mechanism that will identify problems that could not be anticipated and a feedback mechanism to communicate the problems to program managers. Many of the programs discussed in the pages above, including those described by Charters and Pellegrin, Reynolds, Gross et al., and Murphy, failed, in part, because of a disinclination to monitor or because of a lack of mechanisms to incorporate feedback from a formative evaluator into ongoing program development. A provision for formative program evaluation will not be sufficient, however, unless the problems associated with using an evaluation are addressed. That is, consideration will have to be given to the relationship between evaluator and client, to the method of gathering data, to the content of the evaluation, to its medium of presentation, and to its timing.

SUMMARY

A number of case studies have been examined in order to shed some light on the process of program implementation. The available data seem to indicate that policy makers and program planners need to attend to several potential problem areas. It should be noted explicitly that these dimensions do not exist in isolation from each other. For purposes of analysis, however, the delineation of the various strands is important.

Planners and implementors need to attend to statements of ends and means, avoiding abstract or overly ambitious objectives, and they need to be ready to incorporate user input into goal reformulation. A tendency to underplan and a tendency not to consider the complexities of implementation have to be checked. Resources should be objectively assessed and a reserve held back to deal with the unanticipated problems that will almost certainly arise during implementation. In those programs that require new roles for participants, the severe problems associated with learning those new roles must not be overlooked. Program managers must be aware of their crucial position in the implementation process and must be prepared to take an active role in helping their staffs deal with the problems of implementation. Program managers or administrators must attend to the task of maintaining staff motivation through the trials of implementation. Finally, monitoring and feedback mechanisms have to be established to facilitate countering negative unanticipated consequences and capitalizing on the positive ones.

NOTES

[1] John Goodlad and M. Frances Klein, Behind the Classroom Door (Worthington, Ohio: Charles A. Jones, 1970), pp. 72-3.

[2] Jeffrey, L. Pressman and Aaron Wildavsky, Implementation (Berkeley: University of California Press, 1973), p. 166.

[3] Warren G. Bennis, Kenneth D. Benne, and Robert Chin, The Planning of Change, 2nd. ed. (New York: Holt, Rinehart and Winston, 1969), pp. 5-6.

[4] Louis M. Smith and Pat M. Keith, Anatomy of Educational Innovation (New York: John Wiley, 1971), p. iv.

[5] Ibid., p. 44. Kensington is the fictitious name of an elementary school in what the authors claim is a typical middle-class suburban school district. Unless located by city and state, and schools referred to in this paper are identified by the fictitious names used by the researchers in order to preserve anonymity.

[6] W. Charters, Jr. and Roland J. Pellegrin, "Barriers to the Innovation Process: Four Case Studies of Differentiated Staffing," Educational Administration Quarterly 9 (Winter 1972): 4.

[7] Larry J. Reynolds, "Problems of Implementing Organizational Change in the Elementary School: A Case Study" (Ph.D. dissertation, University of Oregon, 1973).

[8] Neal Gross, Joseph B. Giacquinta, and Marilyn Bernstein, Implementing Organizational Innovations (New York: Basic Books, 1971), p. 123.

[9] Martha Derthick, New Towns In-Town (Washington, D.C.: The Urban Institute, 1972), p. 93.

[10] P. Carpenter-Huffman, G. R. Hall, and G. C. Sumner, Change in Education (Cambridge, Mass.: Ballinger, 1974), p. 54.

[11] Ernest R. House, The Politics of Educational Innovation (Berkeley: McCutchan, 1974), p. 186.

[12] Jerome T. Murphy, "Title I of ESEA: The Politics of Implementing Federal Education Reform," Harvard Educations Review 41 (February 1971): 43.

[13] Pressman and Wildavsky, Implementation, p. 99.

[14] Dennis R. Judd and Robert E. Mendelson, The Politics of Urban Planning (Urbana, Illinios: University of Illinois Press, 1973).

[15] John A. Wilson, Banneker (Homewood, Illinois: ETC Publications, 1973), pp. 30 and 33.

[16] W. W. Charters, Jr., Measuring the Implementation of Differentiated Staffing (Eugene, Oregon: CASEA, 1973).

[17] Paul Lauter, "The Short, Happy Life of the Adams'Morgan Community School Project," Harvard Educational Review 38 (Spring 1968): 237.

[18] Derthick, New Towns In-Town, p. 98.

[19] R. C. Casselman, "Massachusetts Revisited: Chronology of a Failure," Public Administration Review 33 (March/April 1973): 129-35.

[20] Roland J. Pellegrin, "Administrative Assumptions Underlying Major Innovation," in The Process of Planned Change in the School's Instructional Organization, ed. W. W. Charters, Jr. (Eugene, Oregon: CASEA, 1973), pp. 19-20.

[21] Seymour B. Sarason, The Creation of Settings and Future Societies (San Francisco: Jossey-Bass, 1972), p. 21.

[22] Pressman and Wildavsky, Implementation, p. 143.

[23] John E. Jones, "An Elementary School Under Conditions of Planned Change," in The Process of Planned Change in the School's Instructional Organization, ed. W. W. Charters, Jr. (Eugene, Oregon: CASEA, 1973).

[24] Stephen K. Bailey and Edith K. Mosher, ESEA: The Office of Education Administers a Law (Syracuse: Syracuse University Press, 1968).

[25] Arthur L. Stinchcombe, "Social Structure and Organizations," in Handbook of Organizations, ed. James G. March (Chicago: Rand McNally, 1965).

[26] Smith and Keith, Anatomy of Educational Innovation, p. 369.

[27] C. Thompson Wacaster, "The Life and Death of Differentiated Staffing at Columbia High School," in The Process of Planned Change in the School's Instructional Organization, ed. W. W. Charters, Jr. (Eugene, Oregon: CASEA, 1973), p. 27.

[28] Amitai Etzioni, *Studies in Social Change* (New York: Holt, Rinehart and Winston, 1966).

[29] Alan Gartner and Frank Riessman, "Strategies for Large-Scale Educational Reform," *Teachers College Record 75* (February 1974): 352.

[30] Sarason, *The Creation of Settings and Future Societies*, pp. 111-12.

[31] Richard O. Carlson, *Adoption of Educational Innovations* (Eugune, Oregon: CASEA, 1965), pp. 83-4.

[32] Goodlad and Klein, *Behind the Classroom Door*, p. 72.

[32] Larry J. Reynolds, "Reducing the Unanticipated Consequences of Change," *Administrator's Notebook 22* (December 1973): 1-4.

[33] Chris Argyris, "Alternative Schools: A Behavioral Analysis," *Teachers College Record 75* (May 1974): 429-52.

[35] Charters, *Measuring the Implementation of Differentiated Staffing*, p. 89.

[36] Carpenter-Huffman, Hall and Sumner, *Change in Education*, p. 53.

[37] Smith and Keith, *Anatomy of Educational Innovation*, pp. 270-74.

[38] Gross, Giacquinta, and Bernstein, *Implementing Organizational Innovations*, p. 203.

[39] House, *The Politics of Educational Innovation*, p. 51.

[40] Carpenter-Huffman, Hall, and Sumner, *Change in Education*, p. 152.

[41] Pressman and Wildavsky, *Implementation*, p. 120.

[42] K. A. Leithwood and H. H. Russell, "Focus on Implementation," *Interchange 4, 1* (1973): 11.

[43] Charters, *Measuring the Implementation of Differentiated Staffing*, p. 43.

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STAGE 5

EVALUATING THE PROGRAM

- Developing evaluation criteria
- Implementing the evaluation
- Reporting the results

A new program generally represents a sizable investment in money, time, and effort for a school district. It is important, therefore, for the district to evaluate the program's effectiveness and to assess whether the program is meeting the identified needs. Evaluation can help the district decide whether to continue, eliminate, or expand the program. This section provides information that the linking agent can use in helping a district develop and carry out an evaluation of the new program.

Developing evaluation criteria

The first question to be asked in developing a program evaluation design is: what do the school district's decision-makers want to know about the program? From all that could be asked about the program's effectiveness, what are the really important questions for the people in this district?

Some possible questions might be:

- Does the program significantly improve student achievement?
- Does the program improve student attitude?
- Is the program more consistent with those that preceed and follow it?
- Are teachers or parents more satisfied with the program?
- Is the program more cost effective than previous programs?

These questions will help determine what aspects of the program are most important to evaluate.

Who is the audience of the evaluation and what will they accept as evidence of effectiveness? There are other important considerations in designing the evaluation. If the evaluation is meant for parents, the kinds of data collected and the reporting method will be quite different from the data presented to teachers. Early determination of the audience makes the evaluation easier to conduct and the report more appropriate.

Implementing the evaluation

When the audience for the evaluation has been determined, the design should be formulated and implemented.

The first step in the development of the evaluation design is to state specific outcome objectives of the program. They should be written to reflect both summative (end of year results) outcomes and formative (on-going monitoring) outcomes. The next step is to decide how the data will be collected. Will tests be used to collect the data? If so, will they be norm referenced or criterion referenced? In choosing tests, the linking agent and the school staff involved should attempt to match the commercially available or locally developed tests to the evaluation objectives. It is important to be certain that the tests used are actually testing the program objectives. Another consideration in test selection is cost. The district should decide how much it can spend on this program evaluation prior to test selection.

If written tests are not appropriate for the evaluation or if it is necessary to collect information from more than one source, data can be collected through interview techniques, structured observation, surveying techniques, case studies, narrative reports, and/or record keeping. As mentioned, the choice of collection technique(s) should be made by considering what type of data the audience of the evaluation is likely to accept as evidence.

The procedures for data collection must also be established in advance. Decide when data will be collected, and who will collect it. In making these decisions, it is useful to examine testing that exists in the district. Sometimes with only slight modification the program evaluation can be done by using the results from present testing or by collecting data at the same times.

Legal implications of testing and district policy regarding testing are final considerations. If the selected design calls for new testing of students, it is important to obtain necessary parental permission prior to testing, and to notify parents about the nature of the testing, and to follow district policy.

Once the data is collected, it must be analyzed in order to interpret the findings and to make recommendations about program continuation, changes, etc. The form of this analysis depends upon the kinds of results needed, the nature of the evaluation design, and the staff capabilities. If the objectives are stated in quantitative terms, the analysis can simply involve judging whether the objectives were met. In other instances, the evaluation might involve testing to determine the statistical significance of the results. Remember that the analysis is only as good as the people who will interpret it. Parents may not react well to statistical significance, while many researchers will accept little else. So, in choosing the method of analysis, pay close attention to the audience for whom the results are intended.

Reporting the results

After the data is analyzed, it should be included, with an interpretation, in a report to appropriate audiences, such as the school board, teachers, parents, administrators. The report should include the questions addressed in the evaluation, the evaluation objectives, the evaluation design, the evaluation results, the analysis of the data, and any recommendations about the program's continuation, expansion, or changes.

Establishing Evaluation Guidelines

Thomas R. Owens and Warren D. Evans

What Factors Influence the Way This Evaluation Will Be Conducted? Many. Guidelines from funding agencies; district policies and parental permission for students to be tested, maintaining confidentiality of data, and approval of evaluation instruments prior to their use; availability of district resources in conducting an evaluation--all are important factors governing an evaluation.

Funding Agency

When a district is receiving state or federal funds to operate a particular program, it is essential for people involved in the evaluation to be familiar with any evaluation guidelines or requirements prepared by the funding agency. For example, a district receiving federal Title I funds under the Elementary and Secondary Education Act has certain types of evaluation data that must be collected and reported. If school staff are not sure of these requirements, a district or state Title I coordinator should be contacted. The funding agency may also specify constraints in the collection of the evaluation data such as those related to HEW guidelines for protection of human subjects.

District Policies

Even if no outside funding is used to operate a program, school administrators should check with the district to determine any local policies or laws related to program evaluation. For example, some districts have a policy regarding the release of

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group evaluation data. In some cases, all evaluation reports are presented to the superintendent, who is then responsible for disseminating them to the Board of Education and the public. Recent legislation regarding parental knowledge and approval of certain types of student testing and the disposition of evaluation information is also an area with which school administrators need to be familiar.

Local Concerns

In addition to district policies and laws related to evaluation, a local school may wish to establish some basic guidelines related to evaluation. For example, some schools require that evaluation instruments be reviewed and approved by the Community Advisory Committee prior to their use. This review can be especially important in detecting sensitive items that would be considered offensive or an invasion of privacy in certain communities.

Evaluation Ethics

As can be seen in citing one example of local concern, the issue of ethics is critical to the effectiveness of the evaluation. A checklist, see Figure 3.1, was developed to help you in planning and implementing your evaluation. Being aware of potential problem areas at this early point in the evaluation may help you avoid these problems later. Read through the form and refer to it as you begin to plan and develop future aspects in the evaluation.

Identify Resources

Evaluation guidelines can also specify the resources available for conducting an evaluation. Before preparing an evaluation plan, it is useful to estimate the budget available for evaluation and to identify personnel and resources likely to be available for the evaluation. These considerations often influence whether an evaluation will be conducted by school staff, evaluators within the district or external evaluators. Available resources within a district can also affect the tasks to be performed by an external evaluator. For example, if an external evaluation is being contracted and the local district maintains an efficient printing shop, it is probably more cost-effective for the external evaluator to prepare a camera-ready copy of data collection instruments and evaluation reports for printing in the district facilities.

District Assistance

In considering personnel within the district who could assist in an evaluation, it is often useful to look beyond persons trained particularly in research and evaluation. For example, a district's director of curriculum and instruction might be an excellent person to evaluate a sample of students' individualized projects. Teacher aides can sometimes be trained to be effective data collectors.

Use of an External Evaluation

In the case where a district does not have a skilled evaluator available within the district and funds are available, it may wish to contract externally for all or part of the evaluation. An externally conducted evaluation generally has the advantages of being more independent, providing findings considered to be more credible by the evaluation audiences and conserves district staff time. Some common limitations of externally conducted evaluations are that: the evaluation personnel do not always understand the details of the program or their rationale; it is often more expensive; external evaluators may sometimes be viewed with suspicion if not distrust; and the evaluation findings may not be as useful in leading to specific program modifications.

When selecting external evaluation by individuals or agencies, you should consider the following factors:

- their training in evaluation methodology
- past experiences in evaluating similar programs
- skill in areas of special need, such as test development
- data analysis capabilities (if these are a relevant part of their task)
- skills in relating to students, staff and other groups, such as parents or community volunteers
- availability and geographic proximity to the district
- their cost in relation to the services they agree to provide

If a decision is reached to contract with an external evaluator, a district administrator needs to negotiate a written agreement delineating the responsibilities of the district and of the external evaluator for the design, collection, analysis and reporting of data. Time spent in preparing such an agreement is more than compensated for by the elimination of possible misunderstandings and conflicts at a later period.

An outline of sample items to be addressed in the agreement is found in Figure 3.2. The administrator should keep in mind that the allocation of responsibilities as shown on the following page is only an illustration. You and your evaluator may want to modify it to fit your particular situation.

Estimating Evaluation Costs and Personnel Requirements

The costs and external personnel required in conducting an evaluation depend on a number of factors such as the type of evaluation to be conducted, the amount of work done by the internal staff, the size of the project, and travel and fees of the evaluator. Evaluation costs can usually be grouped under the following categories: personnel costs, travel, purchasing evaluation instruments, data collection, data coding and scoring, data maintenance, data analysis, report writing, and presentation of findings.

A rule of thumb used by some administrators in proposal writing is to estimate the evaluation costs to be between five and ten percent of the total program budget. Larger projects (for example, those for over $150,000) often can have an adequate evaluation for closer to five percent of the total budget while smaller projects (those under $50,000) may need more than ten percent since many functions such as instrument development are required regardless of the number of students tested.

Now that we have reviewed some of the important considerations in establishing evaluation guidelines, turn to the next page and check the appropriate columns in the box to see whether you have accounted for these important considerations that influence the way your evaluation will be conducted.

REVIEW OR ESTABLISH EVALUATION GUIDELINES

Guideline Considerations	I Have Reviewed/ Established These	These Have Been Applied to the Evaluation Guidelines	More Work Needed
1. Evaluation guidelines or requirements of the funding agency (if applicable)			
2. Legislation regarding parental permission, confidentiality of data and policy concerning release of student records			
3. District policies concerning evaluation			
4. School level policies concerning evaluation			
5. Evaluation budget available			
6. District/school personnel available to work on the evaluation			
7. Policy regarding the use of the district's computer, printing and other facilities			
8. External evaluator's roles defined (if applicable)			
Other areas (list) ______________________________ ______________________________			

Figure 3.3

Evaluation Designs for Practitioners

Maurice J. Eash,
Harriet Talmadge, and Herbert J. Walberg

Planning and implementing any facet of the educational program call for decision making whether the project concerns the program of an entire school system or the day-to-day practice of a teacher in a single classroom. The interactive nature of the educational process produces a dynamic environment; hence, decisions made at one point in time require reassessment at the next point in time before another round of decisions can begin. Evaluation provides a framework for building a systematic data base to aid in making decisions in school and classroom practice. With an appropriate data base problems can be reformulated, both potential and actual consequences can be analyzed, and, as a result, the processes can be redirected.

Practitioners are not afforded the luxury of ideal laboratory conditions. The natural settings of the classroom, the school, or the school system place constraints upon the type of data obtainable; hence, educators must work with less than an ideal experimental design.[1]

Four evaluation designs used in natural settings are described in the following sections.[2] Each involves an evaluation study that takes into account a variety of constraints, but nevertheless provides a basis for subsequent program and/or organizational decisions. The studies range from a true experimental design, one that necessitates the random assignment of students to experimental and control groups, to a design that lacks both randomization and comparative groups.

In each section, the basic paradigm of the evaluation design is symbolically presented. Four symbols identify the elements of the paradigms: R-randomization; X-treatment; O-observation; and

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in some cases, DA-design analysis. Subscripts denote specific treatments and observations. Observations (O) to the left of the treatment (X) denote pretest data, and to the right, posttest data. The experimental group symbols appear above the control group symbols. A broken line between the groups indicates nonequivalent groups.

A True Experimental Design in a Field Setting

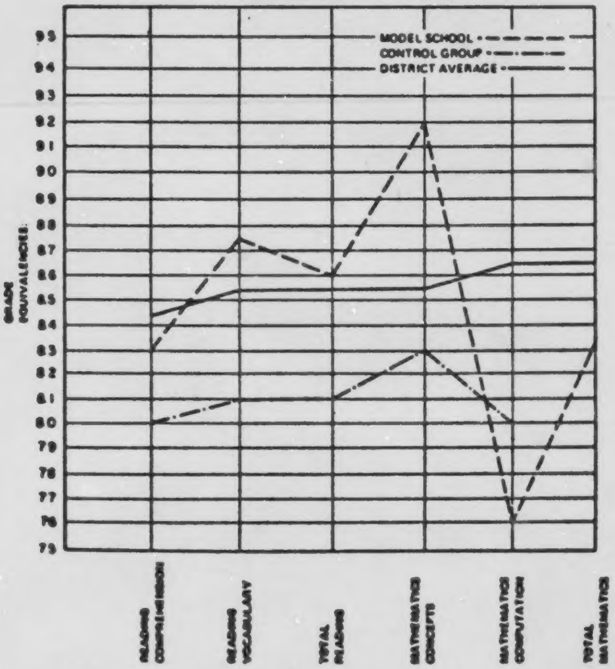
$$\boxed{\begin{array}{ccc} R & X & O \\ R & & O \end{array}}$$

A true experimental design is characterized by its randomization of subjects to treatment-"randomly dividing the litter among treatments"-and is the conventional laboratory-science way of exercising this control. The strength of the design, randomization for control of error, is also a major source of difficulty in field evaluations because studies are conducted where scheduling, teacher preferences in assignment, luncheon arrangements, and a myriad of other considerations enter in. Thus one finds the experimental design infrequently used in reported evaluations. However, because of its power to bring forth more valid findings, we suggest that evaluators search for ways to employ it in field situations. An example drawn from an evaluation of a curriculum model set up under a Title III grant illustrates the power of a true experimental design to bare true differences and the weaknesses of nonrandom comparison groups. Clocktown, a fast growing suburb in a major metropolitan area, received a three-year grant to design a middle school curriculum which would break sharply with the conventional curriculums in the seven other junior high schools. The new curriculum included: 1) greater parent involvement, 2) a more humanistic orientation, 3) promoting greater achievement, 4) promoting more affective growth, 5) integrating pupil personnel services within the curriculum, and 6) offering these changes at a per-pupil cost competitive with the costs in the other junior high schools. After one year of planning the two-year experimental school opened.

Through a combination of events and advanced planning, a true experimental design became possible. A pool of 600 potential students for the Model School was developed through volunteers and recruitment. The Model School was established to enroll 300 students, and all applicants were informed that a random selection would govern admission to the school. The outside evaluators randomly selected the 300 students, thereby creating an experimental group (those in the Model School) and control groups (those who were in the original pool of applicants but were not admitted to the school).

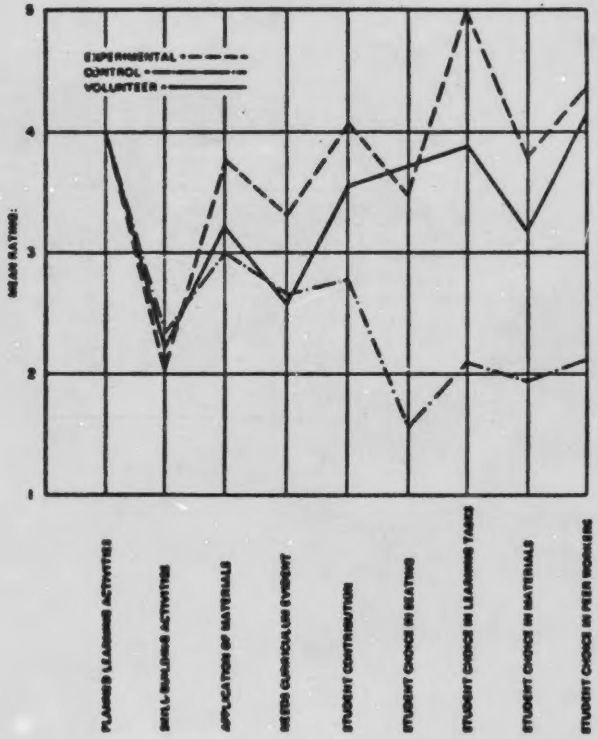
A number of measurements were taken to evaluate the goals of the Model School. Whenever possible, the results were analyzed within the experimental designs of Experimental Group vs. Control Group. One example of the strength of the experimental design over a quasi-experimental comparison group design is shown in Figure I, where achievement test scores for the Model School, the Control Schools students, and the district average for all junior high school eighth graders are graphed. This graph shows dramatic differences in curriculum treatment between the experimental and the control groups in selected areas of mathematics and reading achievement. If the district averages had been substituted for the control group results, much of the effect of the curriculum change would have been obscured, for clearly the achievement of the pool of students is not representative of the district's average achievement.

Figure 1. Reading and Mathematics SRA Achievement Grade Equivalencies for Grade 8. Model School, Control Group, and District Average



A second example of how true differences are masked is seen when a volunteer group instead of a randomly selected control group is used in a comparison of classroom observations made in volunteer teachers' classrooms. In year two, the control group of classrooms to be observed was randomly selected to obtain a more representative sample of classroom practice to compare with the Model School. The differences are much sharper since the first year volunteer control group classrooms were much closer to the experimental group in practice than were the typical district junior high school classrooms. (See Figure 2.) The experimental design is invaluable to control error and to trace the attribution of results to treatment more clearly. Every effort should be made to use it when the question of curriculum effects is at issue or a summative evaluation is at stake.

Figure 2. Mean Ratings for Randomly Selected Experimental Classrooms, Control Classrooms, and Volunteer Classrooms



Nonequivalent Control-Group Design

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O X O
O X O
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It is usually difficult to assign students randomly to classrooms receiving special treatment or to assign teachers randomly within schools to special programs. In the first instance, parents tend to resist changes that vary from the established curriculum without their approval. In the second instance, teachers assigned to new programs involuntarily may affect the outcomes negatively. Through a nonequivalent control-group design, the handicap due to the lack of randomization is compensated for in several ways.

The Textville School District study concerned the problems of evaluating four new reading series to select one for systemwide adoption. Instructional materials play a significant role in the educational process for 75 percent of the instructional time in the classroom, and 90 percent of the homework time is devoted to these materials. Thus, adoption cannot be taken lightly.

Selecting a reading series frequently entails ideological confrontation to the neglect of facts. Publishers display their materials with attractive illustrations and slick copy, and groups of teachers espouse one approach to reading instruction or another as the final solution to all reading problems. Therefore, an evaluation design was developed to serve two purposes: 1) to overcome the difficulties of nonrandomization and 2) to establish a data base for making selection decisions on the basis of facts rather than ideological quibbling.

In designing the evaluation study, the drawbacks of nonrandom assignment of students and teachers to experimental and control groups were taken into consideration by obtaining pretest and posttest data, employing multiple treatments for comparisons with the traditional treatment and comparisons among the treatments, and using the class rather than the individual student as the unit of study. An adaptation of the non-equivalent control-group design is illustrated in Figure 3. Pretest (O_{preT}) and posttest (O_{postT}) reading achievement data were obtained. Data on teacher characteristics (O_1) were initially collected. Subsequent to the introduction of the treatment (X), data were obtained on learning environment variables (O_2: competitiveness, cohesiveness, difficulty, friction, and satisfaction) and on instructional characteristics (O_3: locus of instructional decisions, variety and utilization of materials, and student behaviors).

Figure 3. Nonequivalent Control-Group Design Paradigm

O_{preT}	O_1	X_1	O_{postT}	O_2	O_3
O_{preT}	O_1	X_2	O_{postT}	O_2	O_3
O_{preT}	O_1	X_3	O_{postT}	O_2	O_3
O_{preT}	O_1	X_4	O_{postT}	O_2	O_3
O_{preT}	O_1	$X_{control}$	O_{postT}	O_2	O_3

The Textville schools and teachers were encouraged to participate in the study. Sixty classes from 12 schools were chosen and represented the range of ability, of socioeconomic, racial, and ethnic backgrounds, and of geographic locations found in the district. Assignment to a reading series by grade level is shown in Figure 4. For each reading series, the materials were field-tested in three different schools in grades 1, 2, 3, and 6. In all, the data included 12 different classes per series.

Figure 4. Assignment to Treatment Matrix

GRADE LEVEL	SERIES X_1	SERIES X_2	SERIES X_3	SERIES X_4	SERIES $X_{control}$	TOTAL
1ST	3	3	3	3	3	15
2ND	3	3	3	3	3	15
3RD	3	3	3	3	3	15
6TH	3	3	3	3	3	15
TOTAL CLASSES	12	12	12	12	12	60

Two constraints were imposed on the design: 1) All four classes in a school field-testing the reading materials must use the same series; and 2) the best educational interest of the students must supercede the design of the study. And, indeed, this came to pass: One class found too many difficulties with the series at the peril of impeding their reading progress, and the class was removed from the study.

The data were analyzed to provide information on four questions:

- Do the classes using one series obtain higher reading scores on the reading achievement posttest than classes using another series?
- Do the classes using one reading series perceive their learning environment differently than do classes using another reading series? Do the learning environment and reading series taken together affect achievement?
- Do selected teacher characteristics in conjunction with a given series affect reading achievement?
- Does instruction differ in classes using different reading series?

Statistical analyses indicated that the pretest score is the single most significant predictor of reading achievement despite teacher characteristics and regardless of the reading series. After the effects of the pretest scores are removed, competitiveness is the only other variable that predicts reading achievement. The higher the competitiveness in the learning environment, the lower the reading achievement. There are no significant correlations between competitiveness and reading series, teacher characteristics, or instructional characteristics.

The final selection decision for the Textville School District shifted away from an emphasis on ideological issues such as phonics-oriented vs. nonphonics-oriented reading approaches or linguistic vs. nonlinguistic reading approaches. In place of these, attention was focused on the instructional aspects of a reading program that tend to reduce competitiveness, and on such concerns as the district's philosophy of reading, cost factors, implementation problems, and the degree of teacher dependence on outside support.

Time-Series Design

1972 1973 1973 1974
O X O O X O

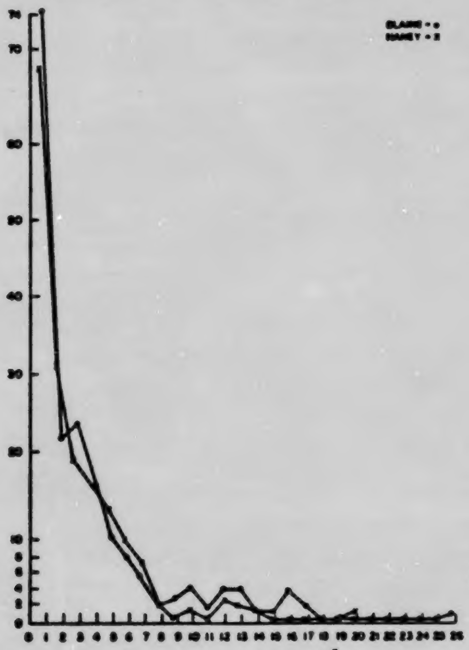
Practitioners are frequently faced with the necessity of making major program changes which reorganize curriculum and structural arrangements. Not infrequently, such changes are precipitated by external forces that are impatient with the setting up of an evaluation design that would require the establishing of control groups before the change is made. In these cases, data are frequently desperately needed by administrative decision makers if they are not to be at the mercy of rumor or pressure groups. Such was the case of the Parkland School District, which was suddenly under a legal mandate to integrate its schools. De facto segregation resulting from segregated housing placed practically all the black population in one elementary school and the white population in six schools, and produced segregation up through grade 6. The junior high schools were integrated in name, but not always in reality, for the students segregated themselves by race in the lunchroom and on the playground. Faced with a legal mandate to bus students to achieve equal racial proportions in all seven elementary schools, Parkland administrators requested an outside evaluator to help them set up an evaluation design that would provide basic data on these questions: 1) What effects does the structural reorganization required by busing have on student achievement and on the learning environment? 2) What data would be useful for program planning and for alerting the administration to potential difficulties?

The evaluation was hampered by the inability to set up control groups through randomization. Moreover, since the entire school system was involved, no separate control groups were available. Within these limitations, it was decided to use a time-series design for a two-year period that would allow within-the-group comparisons, use a multiple collection of data, and give a reading on several indices of progress. Experience indicates that over the two years many productive hypotheses were generated and an invaluable data base for charting progress in achievement, race relations, and classroom instruction was established.

A pretest and posttest on general achievement was given every child in the fall and spring. Since there were previous local norms available, these data quieted fears that integration was destroying achievement. A learning environment measure, administered in the spring, revealed that further curriculum planning was needed to improve the learning environment for both white and black students in different schools. An analysis of the learning environment and achievement measures revealed that some schools appeared to be much more successful than others in providing a stimulating learning environment and promoting achievement. While the lack of adequate controls limited generalizations or conclusions, these data did pinpoint areas for closer investigation by administrators and teachers. One of the more immediately useful applications of evaluation data came when rumors of the deterioration of discipline in one school swept the community. The recently administered learning environment inventory profile calmed both the school board and the public by its demonstration that the students in this school perceived their environment very much as did their counterparts in other schools, and that there was no greater conflict or disruption in their school than in the others.

A third area of data was an analysis of the records of disciplinary cases in the junior high schools. These again provided some short-term data as the basis of decisions, since the offenses that took up most of the administrators' and guidance counselors' time were being committed by a very small group of students. (See Figure 5.)

Figure 5. Summary Graph of Frequencies of Behavioral Incidents



Interracial problems were not as prevalent as intraracial problems. A second year of charting these behavioral incidents showed that the concentration of social services on the few major offenders had removed them from the behavioral records in the second year. In addition, it was found that interracial conflict had decreased. Thus, one is led to conclude that the time-series design provides a useful data base for decision making in a situation where tensions induced by structural changes cry for the voice of rationality. One must admit that these data have limited generalizability, but they have been invaluable in the context in which they are collected and in demonstrating that evaluation can serve several purposes in applied settings.

No Comparison Group Design

Design Analysis	X - O X - O X - O	Design Analysis

Not infrequently, an evaluator is confronted with a program that is to be used but is being undertaken with restraints that forestall the use of control groups. Is usefulness of evaluation forestalled under these circumstances, and must one retreat to the rhetoric of castigating shortsightedness in the developer? The fourth example deals with such a problem.

An outside private agency provided funds to increase and improve the teaching of the arts in schools. Launched from very broad objectives, "to enable parents and community leaders to use the arts as communication tools," the agency requested evaluation assistance to improve the series of workshops that it had designed for teachers.

From the workshops' guides that were presented and from the funding proposal, an analysis of workshop activities to achieve the goals was prepared. The activities proved to be a better source of goals than the diffuse general objectives. The evaluation design was concerned with: 1) Were the activities being taught in the workshops? 2) Were they perceived as useful by teachers since they incorporated creative and nonconventional teaching apporaches? 3) Were they being implemented in classrooms and did they maintain the integrity of the activities?

The evaluators were not permitted to gather data from control classes in the schools, nor were they to observe the instructors assigned to the workshops. The design of the evaluation structured the gathering of data by analyzing the program and developing an activity analysis, which was then converted into an instrument to be used by teachers to evaluate workshop activities on four dimensions: 1) the workshop participants' reaction, 2) whether teachers used any one activity in the classroom, 3) the students' reactions, and 4) ease of implementation. A second source of data was gathered from a pretest and a posttest of learning environments in the workshop participants' classrooms. A third source of data was observation in classrooms where teachers taught the workshop activities to their students. A fourth source of data was a standardized teacher evaluation questionnaire to evaluate the workshops.

From these data an analysis was made of the workshops, and recommendations were rendered on which workshops and what activities were most useful in the classroom. As this evaluation progressed, feedback sessions were held with workshop directors to assist them in conducting the next semester's workshops. Evaluation in this case focused on providing clarity to a group of program developers who were working in an ambiguous area. Although many of the traditional parameters of an evaluation design are lacking, these are data that can be generated and comparisons that can be made to shape the educational product. In the sense of serving to improve practice through the establishment of a data base and promoting meaningful comparisons for practitioners, the evaluation design remains true to its calling in bringing rationality to play on educational activities.

Cooperative Planning in Evaluation

Evaluation is often viewed by practitioners as being outside their reach: The designs are incomprehensible, the data are too costly to gather, the participants are threatened by the potential of the findings, and the effects, efforts, and efficiency cannot be evaluated with any degree of objectivity anyway. Our experience, gathered over a wide variety of projects, would indicate that practitioners are handicapped by too narrow a view of evaluation and by their failure to systematically build an evaluation design into projects. Moreover, troublesome problems are not approached through an evaluation design which in its use converts rhetoric to a factual base, as was illustrated in the example on the reading series. In short, decision making and choice taking are blind through the lack of evaluation designs which open up options and permit an earlier use of correctives in program planning.

To provide for an evaluation design in the early stages makes for a more open commitment to the major goals of a project, and establishes a degree of latitude for shifting direction based on evidence which often is denied when the program participants' personal commitments to a project deepen with effort. Evaluation can serve to keep the focus on the quest for a better way to provide education as opposed to espousing a dogma of "the way to provide quality education." If evaluation is seen as a necessary part of projects and problem solving, the use of evaluators and evaluation findings becomes as significant as the appropriate use of evaluation designs. Findings must be implemented to be effective in decision making.

At the Office of Evaluation Research, we have found that cementing an early working relationship between the evaluators and the practitioners is the best guarantee of the use of evaluation findings. As outside evaluators, this entails building an evaluation design early in the project with inputs from practitioners on their needs for data. In another context, we have referred to this process as a coactional relationship[3] where the two parties are engaged in a mutual task with a commitment to the discovery of options and the search for truth. Extra effort is required from the evaluators to explain designs and their strengths and constraints; but these early sessions also build the foundation of commitment to follow the findings wherever they may lead. The process is coactional in that the evaluators perceive the context in which the evaluation design is being used and it is early on plans for implementation of findings at appropriate junctures. Our contention is that many evaluation reports are superfluous because they are ill-timed to the schedule of information needs of practitioners, or return findings that are arcane and remote from the decisions that are pressing the descision maker. We see, as imperative to success, the need to be sensitive to the roles of the evaluators and practitioners and their relationships in building evaluation designs. The four evaluation designs described illustrate applications of a methodology in a field context. Brevity did not permit the description of roles and relationships, though they are implicit in the applications. Appropriate use of evaluation designs, we contend, can bring rationality into play in field-based problems and can improve educational practice.

FOOTNOTES

[1] The studies used to illustrate the designs were conducted by the Office of Evaluation Research, College of Education, University of Illinois at Chicago Circle.

[2] For additional designs, the reader may wish to consult Donald T. Campbell and Julian C. Stanley. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally Company, 1963.

[3] Maurice J. Eash, "Transactional Evaluation of Classroom Practice," in Studies in Transactional Evaluation, ed. Robert M. Rippey, Berkeley: McCuchan Pub. Corp., 1973.

Common Evaluation Hazards

Donald P. Horst and B. M. Fagan

When used correctly, tests can provide the user with sound, interpretable evaluation results. When tests are used inappropriately, evaluation results are often inconclusive and may be seriously misleading. In a review of 2,000 evaluation reports from educational projects, Horts, Tallmadge, and Wood (1975) identified common errors or hazards in evaluations and in the use of tests. The hazards and ways to avoid them are presented below in the order of their judged frequency of occurrence and severity. Any one of them can invalidate an otherwise sound evaluation and should be avoided.

Hazard 1: The Use of Grade-Equivalent Scores

Grade-equivalent scores provide an insensitive, and, in some instances, a systematically distorted, assessment of cognitive growth. One basic problem with grade-equivalent scores is conceptual in nature--for example, a grade-equivalent score of five attained by a third grader on a math test may be taken to imply that the student knows fifth-grade math. This inference is seriously in error. A more reasonable assumption would be that he or she can do third-grade math as well as the average fifth grader, but even that assumption may be incorrect as it is likely that no average fifth-grade students have ever taken a third-grade level of the test.

The use of grade equivalents for evaluation purposes creates a second problem in that they do not form an equal-interval scale and should never be averaged. Finally, grade equivalents are constructed based on the assumption that growth occurs at the same rate throughout the school year. Research has shown, however, that learning typically does not follow this regular pattern and, whenever this is the case, gains measured in grade equivalents will be artificially inflated or reduced. For a complete discussion of their problems, see the paper in this volume entitled "Problems with Grade-Equivalent Scores."

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Hazard 2: The use of a Single Set of Test Scores for Both Selecting and Pretesting Participants

When students are selected for participation in a special instructional treatment because they obtained scores that were systematically higher or lower than the average of the total group tested, the use of these scores as pretest measures invalidates any kind of norm-referenced evaluation. This problem stems from what is known as "statistical regression," "regression toward the mean," or simply, the regression effect.

If low-scoring students are retested on the same or a comparable test, they will score higher on the average, while the initially high-scoring group will score lower. The result is that low-scoring groups appear to learn more from a special program than they actually do, while any treatment-related gains made by initially high-scoring students may be obscured.

To avoid this hazard, pretesting of students selected for participation in a special treatment should be separate from selection. They can be pretested using the same form of the same test used for selection if sufficient time elapses between the selection and the pretest administrations. Selection may also be based on scores obtained on an alternate form of the same test or on a completely different test. Another perfectly legitimate alternative is to base student selection on teacher recommendations or classroom grades.

Hazard 3: The Use of Norm-Group Comparisons with Inappropriate Test Dates

In norm-referenced evaluations, tests should be administered as near to the midpoints of the calendar time intervals when the publishers tested their norming samples as possible. When control groups are available, few evaluators would consider testing the treatment and control groups more than a few days apart. When norms are used as a substitute control group, this same consideration needs to be given to test dates.

Project students should be tested within two weeks of the midpoint of the interval during which the normative data were collected. Testing within six weeks of empirical normative data points is permissible if linear interpolations or extrapolations of the normative data are made. In fall-to-fall or spring-to-spring evaluations, however, deviations from empirical normative data points should be in the same direction and of approximately the same size for both pre- and posttesting. This requirement does not apply to fall-to-spring evaluations where interpolations or extrapolations are derived from two empirical data points within the same school year.

Hazard 4: The Use of Inappropriate Levels of Tests

If most of the pupils achieve very high or very low test scores, the level of the test may be inappropriate for assessing their performance. If pupils encounter the test floor at pretest time or the ceiling at posttest time, treatment effects will be underestimated. Conversely, if the ceiling is encountered on the pretest or the floor on the posttest, gains will be overestimated. Ideally, students should score in the middle of the range of possible raw scores.

Test levels should be selected on the basis of the achievement levels of the students, not on the basis of their grade in school. In most cases, the nominally recommended test level or one level below will be suitable for testing Title I students. See the two papers in this volume entitled "Out-of-Level Testing" and "Test Floor and Ceiling Effects" for additional information on this topic.

Using a test level other than that nominally recommended for a particular grade is likely to mean that norms tables for the tested students are not included in the test manual. However, it is not meaningful to assess either status or gains by comparisons with students at a different grade level. The status of the sixth grader should be assessed using sixth-grade norms even if he is tested with a fourth-grade test. Some publishers have provided special out-of-level norms tables. Most major test publishers, however, have interlocked their test levels by providing an expanded standard score scale that enables the determination of score equivalencies between adjacent test levels. These scores make it possible to predict from a pupil's score on one test level how he would have scored on the next higher or lower level, thus providing access to the in-level (age- or grade-appropriate) norms.

Hazard 5: Missing Test Scores

Analyses of evaluation data should be based only on those students with both pre- and posttest scores. Interpretation of these data, however, should take into account the characteristics of the students who dropped out, entered late, or graduated from the project. For example, if all of the lowest scoring students on the pretest dropped out before posttest time, the average posttest score would increase with respect to the pretest scores simply because of the missing students. Likewise, if the high-scoring students graduated from the group, the mean posttest score would be artificially deflated.

To avoid this hazard, every effort must be made to obtain pre- and posttest scores for each project participant, and to base comparisons on those students for whom both scores are available. Data from students having only pretest or only posttest scores must be carefully examined to see if they differ in some systematic way from the data of students having both pre- and posttest scores. A description of any of these differences should be included in the evaluation report.

Hazard 6: The Use of Noncomparable Title I and Control Groups

This hazard is closely related to Hazards 7 and 8. In conventional experimental designs, treatment and control groups should be similar in all educationally relevant respects before the treatment begins. Groups that differ in terms of pretest scores present an obvious source of bias. Other more subtle factors such as difference in age, sex, race, or socioeconomic status can also exert strong biasing influences and should be avoided. Nonvolunteers should never be used as controls for pupils who volunteered (or were volunteered by their parents) for a particular instructional project.

In a true control group design, students should be assigned to treatment and control groups on a strictly random basis. Under most circumstances, however, random assignment is neither feasible nor desirable in Title I programs. One exception to this general rule is where services are provided to half the identified Title I children one semester (or short-term period) and to the remainder the following semester. For example, with a semester-long reading program, pupils could be randomly assigned to first- or second-semester groups.

For the first half of the year, one group should serve as the control group for the other, but both groups would ultimately receive equal amounts of the project instruction. This set of circumstances would provide a true control group design during the first semester. That design would not apply during the second semester, however, unless the first-semester project had no impact on the participating students.

In some cases, pre-existing groups will be enough alike so that they can appropriately be considered equivalent to random samples from a single population. In other cases, a control group will be known to differ systematically from the project group. Where the difference is small (no more than a fifth of a standard deviation from a nationally representative group), the control group model may still provide the best method of evaluating the project, and statistical adjustments can be made to compensate for between-group differences (see the technical paper entitled Statistical Adjustments for Nonequivalent Control Groups). Where the differences are large, however, there is no way in which a noncomparable control group can provide an accurate estimate of how well the project group would have done without the project.

Hazard 7: The Use of Inappropriate Statistical Adjustments with Nonequivalent Control Groups

There are several statistical procedures that are widely used in an attempt to compensate for initial differences between treatment and control groups. Some are legitimate while others are not. Making between-group comparisons using either "raw" gain scores or "residual" gain scores falls into the latter category. Both procedures should be scrupulously avoided.

A raw gain score is simply the difference between a pre- and a posttest score and reflects the gain made between testings. It is argued that, although two groups may have been somewhat different in terms of initial achievement levels, their expected gains should be roughly comparable after participating in the same educational project. This would be true, however, only when each group's posttest standard deviation is the same as its pretest standard deviation. Where the posttest standard deviations are larger than those of pretest scores, a raw gain score analysis will systematically underestimate project effects. Conversely, the procedure will systematically overestimate project effects where the standard deviations of pretest scores exceed those of posttest scores.

A residual gain score is the difference between an actual posttest score and a posttest score estimate derived from the combined project and control group regression line. Presumably the mean residual gain score for a group that participated in an effective project would be positive while that for the control group would be negative. Also, the sum of the absolute values of the two differences would provide an index of the size of the project effect. Unfortunately, it can be shown algebraically that a residual gain score analysis always underestimates the size of the project effect except where the groups' pretest scores are equal. Furthermore, the amount of understatement is directly proportional to the size of the initial difference between groups.

There are other factors, such as how the project and control groups were formed, which determine the appropriate adjustment procedure to compensate for their initial differences. Refer to the technical paper entitled Statistical Adjustments for Nonequivalent Control Groups for a more complete discussion of this topic. Here it is sufficient to point out that neither raw nor residual gain score adjustments are adequate.

Hazard 8: Constructing a Matched Control Group after the Project Group Has Been Selected

Finding "matches" for Title I participants in some other group is a fundamentally unsound practice. Unless the "matches" and the Title I pupils are equally representative of the groups from which they are drawn, statistical regression will act differentially on the two groups and artificially inflate the apparent gains of one group with respect to the other.

In the most common situation, the group from which the matching control pupils are drawn will be higher achieving than that from which the Title I group pupils are selected. Consequently, the control group pupils will be farther below the mean of their group than the project group children will be below the mean of theirs. On retesting, then, the control group students will show greater statistical regression and their posttest scores will be too high to serve as a no-project expectation for the Title I participants.

The correct procedure for establishing matched control groups (although probably not feasible in Title I settings) is to find matched pairs of students within a single group and then assign the members of each pair randomly to the project or the control group.

Hazard 9: The Careless Administration and Scoring of Tests

Testing must be accomplished with scrupulous attention to detail. For most evaluation models, the primary requirement is that project and control or comparison groups be tested in exactly the same way. When a control or comparison group model is used, minor variations from the procedures described by the test publisher are permissible. In norm-referenced evaluations, project groups should be tested in the same way as the students in the norm group. This means that deviations from the procedures outlined by the test publisher are not permissible.

Problems arise if tests are administered or scored in an inconsistent and careless manner. If there are differences in the ways in which the test takers and the norm group students are tested or if there are differences in the procedures, conditions, and scoring at pretest and posttest times, then it is impossible for the resulting data to be accurately interpreted. There are no statistical manipulations that can compensate for mistakes made in administering or scoring a test.

To avoid this hazard, the following steps should be taken:

1. Test procedures must be orderly and accurate if scores are to be meaningful.

2. Test administration and scoring procedures must be exactly the same for the project group as for the control, comparison, or norm group used to generate the no-treatment expectation. Testing project group pupils in exactly the same way as pupils in the

norming sample means following the test publisher's directions in every detail.

3. The procedures, and scoring methods used during posttesting must be exactly the same as those used during pretesting.

Hazard 10: The Use of Different Instruments for Pretesting and Posttesting

In the norm-referenced design, it is not advisable to change tests between pre- and posttesting because there is no adequate way to compare pretest scores on one test with posttest scores on a completely different test. Since each test publisher follows slightly different norming practices, it is likely that one test's norms will be slightly "easier" than another's.

This difference in norms could magnify or obscure real gains if pretesting is done with a different instrument than that used for posttesting. While it is not essential to use the same form and level of an achievement test pre and post, this practice is also recommended.

Some tests have been developed so that the lower levels are intended for use at the end of one grade and the beginning of the next. In these instances, to use the same form and level of test for fall pretesting and spring posttesting, it will be necessary either to pretest or posttest out-of-level. This practice is considered preferable to changing test levels if and only if it does not cause test ceilings or floors to be encountered. Changing test levels is always preferable to encountering ceiling or floor effects even though the change will introduce an unknown amount of error into the measure of gain.

Hazard 11: The Use of Inappropriate Formulas to Generate No-Project Expectations

Many projects use an unrealistic theoretical model or formula to calculate "expected" posttest scores from IQ or other pretest scores. If students do better than the calculated expectation, the project is considered a success.

The majority of the methods that have been devised for calculating performance-level expectations rest on untenable assumptions. Neither IQ scores nor grade-equivalent scores should ever be used to generate no-project expectations. To illustrate one particular problem, where a student who has gained .7 months per month, on the average, since beginning school, it is typically presumed that he or she will continue to grow at the same rate unless a special program increases the rate. Unfortunately, grade-equivalent gains measured from fall to spring will usually exceed this rate--even for typical Title I children--and projects will appear to be more effective than they really are.

In norm-referenced models, no-project expectations should be generated solely from empirical percentile norms tables. When control groups are used, the actual posttest scores of these groups provide the proper basis for evaluating project effects. In the special regression model, a regression line based on comparison group data can be used to estimate the posttest scores.

Hazard 12: Mistaken Attribution of Causality

Observed gains may have resulted from the Title I project, but there are always plausible alternative explanations. The plausibility of these alternative explanations should be carefully examined before evaluation results are attributed to project impact, as evaluation hazards are often the cause of apparent gains or non-gains.

Sometimes project participants learn substantially more than would have been expected, but the project, per se, is not responsible. Instead, the gains could be a result of the Hawthorne effect (Whitehead, 1938) in which special project participants do well simply because they are getting special attention. An opposite result may follow from a John Henry effect (Saretsky, 1972). In this case, comparison group students work extra hard to prove that they are just as good as project students.

Other likely causes of misleading gains are unrecognized "treatments" which have nothing to do with the project. Most school systems are in a constant state of flux with multiple changes every year. Changes in school programs, personnel, facilities, class sizes, community characteristics--any or all of these factors can affect student performance. Also, the true source of achievement gains is sometimes improperly identified because children are involved in more than one project. Under these conditions, it may be impossible to determine causality in an unambiguous manner.

To avoid this hazard, the evaluator should examine all plausible alternative explanations for the observed effect. Only where there is good reason to believe that other influences were not responsible, should causality be attributed to the project.

* * *

The table below indicates which hazards present the biggest threat to validity of the Title I evaluation models.

HAZARDS ASSOCIATED WITH EACH EVALUATION MODEL

	Norm-Referenced Model	Comparison Group Model	Regression Model
1. Grade-equivalent scores	X	X	X
2. Selection based on pretest scores	X		
3. Norm-referenced testing on inappropriate dates	X		
4. Inappropriate test levels	X	X	X
5. Missing test scores	X	X	X
6. Noncomparable groups		X	
7. Inappropriate adjustments		X	
8. Post-hoc matching of groups		X	
9. Careless testing	X	X	X
10. Noncomparable pre- and posttests	X		
11. Inappropriate posttest estimates	N/A	N/A	N/A
12. Mistaken attribution of causality	X	X	X

The Influence of External Political Factors On the Role and Methodology of Evaluation

Henry M. Brickell

I have never studied the influence of external political factors on educational evaluation, and thus I cannot speak as a scholar of political influence. I will speak instead as a bullseye -- a well-riddled target of political factors. I am an object of these influences rather than an investigator of them. I have learned about political forces the way an iron filing learns about magnetic forces.

From among the different viewpoints from which I might choose to speak -- teacher, administrator, evaluator, student of evaluation -- I am going to speak from the viewpoint of a person who heads a non-profit educational evaluation business. Our business has to attract customers and win contracts in order to survive. We live on contracts.

Our customers are federal, state, and local governments. If political means governmental, then our business environment is 100% political. That is, the external factors that influence our evaluation work (apart from the professsional factors that influence it) are 100% political. The government officials who employ us are engaged in winning and exercising power -- power to decide who gets what. These officials administer educational programs -- or the other government officials who are above, beside, or beneath them administer these programs -- and their jobs, salaries, promotions and even their careers are intertwined with the programs they hire us to evaluate.

Their motives in hiring us are political; that is, governmental. They seek our help in deciding how to exercise their

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power over who gets what (and to exercise it more rationally, we would hope). Even if the government officials who hire us do so only because they are obligated by their funding agency to employ an evaluator, their motives in employing us nevertheless have to do with winning and allocating resources. At the simplest, if they do not hire an evaluator, they cannot keep their money coming in.

Moreover, the government -- be it federal, state, or local -- is a layered complex of people. We have to treat government as a complex rather than as a single entity. We have to recognize that government officials are as likely to use the art of politics in dealing with each other as in dealing with outsiders. The evaluative evidence we supply becomes a card in the political deck used in the game called government.

Examples of Political Influence in Evaluation

Before preparing this article, I turned to a number of evaluation reports produced by my organization in the hope of finding an example of an evaluation study where external political factors had been at work. It happened that the first report I examined contained a good example, and so did the second, the third, and the fourth. In fact, I did not find any that did not yield an example; some could constitute full-fledged case studies.

Let me give you a few illustrations. The names of the individuals and the organizations in the examples have been changed so as to protect the guilty. If there is any recognizable resemblance between these descriptions and actual cases, blame it on my inability to erase the evidence. I hope you will not recognize any of these cases. As I said earlier, we still have to get more evaluation contracts from these same people.

Example 1

Some time ago we evaluated the use of paraprofessionals in the schools of a major American city. In an earlier study of paraprofessionals in that same city, we had found that people were happy with their work. The paraprofessionals themselves, the school principals, the teachers, the kids, and even the parents were quite satisfied. But this second study of paraprofessionals was to deal with the actual impact they were having on pupil learning.

Shortly after receiving our contract from the city board of education, we learned that paraprofessionals were not hired or paid by the central administration. Instead, they were selected and paid by the several area superintendents who headed the geographical subdivisions of the school system. While meeting with area superintendents to explain the study, one of their spokesmen opened up with something like this:

> Okay, you evaluators. Let's get one thing straight from the start. We have these paraprofessionals here in these schools not only to help kids learn but to link us to the community. That's why we have them. That's why we're going to keep them. We're not looking for a report about test results that will cause any trouble with the board of education downtown. They've got their reasons for giving us the money to hire paraprofessionals; we've got our reasons for taking the money. So no matter what you find out about kids' achievement, we're going to keep our paraprofessionals. Don't make it difficult.

Alerted thus, we made our study, and we were lucky that time. We found that the presence of paraprofessionals did in fact improve pupil achievement. Were we delighted! We never told anyone, of course, but the experimental groups became our home team and the control groups became the visitors from out of town. We sat at the edge of the field throughout the game, voicelessly cheering: "Make a significant difference!"

Example 2

On another occasion we were employed to study a graduate training program. We arrived on the scene, as we so often do, a few months before the director was to submit his renewal request to his funding agency. The director himself was relatively new. Since taking the job, he had made a significant number of improvements in the program, as he explained to us in an early interview. He had also explained these improvements to his dean and to his funding agency. Now all he needed was the evidence. We searched in vain. Nothing in the data we gathered demonstrated the effect of these improvements, and that is what we wrote in our draft report. Like so many others with whom we have worked, the director offered to assist us by reviewing our draft before we put it into print. (We always seem to get this kind of help, even if we do not ask for it.) The dean then offered to help the director review our draft. Both of them called us in for a long and agonizing interview in which they challenged the accuracy of the data, our method of data gathering, the competency of our interviewers, our interpretation of the data, the tone of our writing, and the overall quality of draft report. They sent us back to rewrite it completely, then required us to turn over the basic data to them for reanalysis, and they did not re-employ us to continue evaluating the program as they had originally intended. I do not know what ever happened to our promises to transmit the findings to the graduate trainess who had supplied the data for the findings.

Example 3

At another time we were serving as the external evaluator of a large-scale program for a federal agency. Our work included continuous reporting of progress in the program. The first submission we made was a formative evaluation report intended to help the program director and his staff get all activities properly launched. Our report was immediately returned to us (we had submitted it in draft, as usual) and we were told that 100 pages was too much help. The director could make do with a lot less. Besides, he and his staff felt that a fair amount of what we had to say was off target and not particularly useful. He asked us to shrink the length of the report, cut out some of the negative material, and try to write with a more balanced viewpoint. Then he could submit a copy of the report to his funding agency. We cut it in half, rethought the negative things we had said, eliminated some, and softened others.

Some time later, the entire program was transferred from one funding agency to another. The new agency found great fault with it and considered reducing its scope and its cost or terminating it altogether. Because we had not found that much fault with the program while serving as its external evaluator for the previous agency, we soon found outselves siding with the program people against the new agency. Before many weeks had passed, we had become strong advocates of the program, thinking it was being unfairly treated by its new funders. You might say that we had begun to evaluate the behavior of the new agency. Moreover, we went to the top man in the agency, complained that his people were making a mistake, had them brought into his office, pointed out their errors, and appealed to him to stop them before they damaged the program. This was more awkward for us than you may realize; we had to win a new evaluation contract from the new agency in order to continue as the external evaluators. We worked our way through the situation by using the instinctive ability of every born evaluator: the ability to bite the hand that feeds you while seeming to be only licking it. Eventually, the funding agency decided to continue the program and to continue our services as external evaluator. Our relations have been only normally tense since that time.

Example 4

Some time ago one of our staff turned in a draft evaluation report to the project director in a local school district. The local director wrote us a letter in response, noting a number of points at which he felt we had misjudged the project. We compared his letter to our evaluation report and found that the project director had turned in a perfect scorecard; his letter singled out 100% of our negative findings. Our staff member was then called before the entire local project staff and asked to defend and justify the findings. My telephone rang at about noon the day the staff member went out to see them, and he said: "The meeting just ended here in the school district, and I have agreed to make some changes, even though I honestly think the report is right as it stands. But I have a problem with one point. The director says that if the superintendent ever sees my recommendation saying that the superintendent himself ought to give the project more personal support, he will probably cancel our contract. What do you want me to tell him?" I was incensed! I said: "Tell him your comment stands. Let the superintendent go ahead and cancel the contract." You can see that I was in no mood to be pushed around by a project director. We always take strong stands like that on contracts of less than $10,000.

Example 5

In another case a federal agency employed us to write an RFP calling for bids to evaluate more than $100 million worth of teacher training projects that had already been completed. The agency told us that it wanted the teacher training to be evaluated using pupil learning as the criterion. We said: "That's a terrible idea. Nobody can do that. Let's not put that in the RFP." The agency explained to us that pupil learning was the only criterion that really interested it. If teacher training didn't improve pupil learning, why should government spend money for it?

When we wrote the RFP, we were careful to work in a long section dealing with alternative criteria for evaluating teacher training: pupil learning, pupil behavior in immediate response to instruction, teacher learning, teacher behavior in immediate response to training, and so on. We tried to put enough clues in the RFP so that the bidders would be smart enough to reject pupil learning as the criterion, but they weren't.

After the government contracted with the winning bidder (a distinguished and nationally-known non-profit agency), the government hired us to monitor the contractor's work. Since we had written the RFP, we knew what the government expected of the contractor.

For six or eight months we watched the contractor attack the problem and shook our heads slowly, saying: "This isn't working; we knew it wouldn't work; he's not going to be able to solve the problem." But what should we report to the government? After all, we had written the RFP. Should we declare that nobody could do what we had called for? Or should we declare that this particular contractor could not do it? Our problem was worse than you might suspect. You see, our monitoring contract was of course conditional on the other agency's evaluation contract. Our PT boat was lashed to the side of its cruiser. If we fired a torpedo into his side, he would take us down with him. It took us some time to puzzle our way through the complex ethical considerations that occur to an evaluator at a time like this. Then, with mixed emotions, we fired the starboard tube. Down we went together. That did not make for good relationships between us and our professional colleagues in the other non-profit agency, and it wasn't good for our financial situation, either.

Example 6

On another occasion we were retained by a state education department that was then financing a number of computer-based information systems. Each system was directed by a more or less aggressive director, and each one was competing for scarce funds within the department. All of the directors had been appointed to a committee to help decide which services would be supported, which ones consolidated with the others, which ones terminated, and what new ones started.

The committee had so much difficulty reaching agreement about these seemingly simple questions that it brought us in as outsiders to study the several systems and recommend what the department should do with them. We conducted the study with energetic assistance from the various directors.

Our final report (reviewed beforehand by the director of each system) managed to jump over the question of hardware compatibility by concluding that the big new fourth-generation computers now becoming available made the question obsolete. All of the software being used could be run on any hardware configuration. And our report managed to finesse our way out of the question of conceptual compatibility.

As to which system should be collapsed, continued, or expanded, we said that that depended on market demands. And so we recommended a field survey of users' interests to gather data about market demands. Of course, we offered to make that study if they would hire us again.

The committee examined our report and decided that they did not need any more help of that kind. So we turned elsewhere and rounded up 50-odd clients -- the 50-odd intermediate service units that were wholesaling the systems to retail customers in local school districts. The service units hired us to make a users' study. When we completed the final report, the steering committee representing the 50-odd units asked us to make press-numbered copies of the reports to prevent any of the units from loaning its copy of the report to the special state investigator, who was just at that time examining the performance of the intermediate service units. They did not want the state investigator to do a hatchet job on them, using our report as a sharpening stone. We tried to tell the truth in the report yet not sharpen the state investigator's weapon. I don't think we made it. The 50-odd units haven't been back to see us.

Example 7

In another case we were evaluating a 3-year-old project for a local school district. The innovation was being used in several schools at an extra cost of about $50,000 and was scheduled for expansion to the remaining schools if we found it successful or for termination if we did not. Don't take that too seriously. We have never yet made an evaluation study that the client permitted to decide the life or death of a project. Other factors, many of them more powerful than our findings, are always at work.

The innovation was expected to make a considerable improvement in cognitive as well as affective learning, according to what the superintendent, the assistant superintendent, and the principals had predicted to the board of education three years earlier. We designed a study, collected the data, made an analysis, and concluded that there was no significant difference between students in the experimental schools and comparable students in the other schools.

When we discussed the results informally with local personnel before writing the final report, we were offered good explanations of the findings. The principals explained that the board of education had not supplied full funding for the program. Rather, the board had cut the program back about halfway through, with the result that the principals could not buy the materials and hire the paraprofessionals needed to run the program full-scale. The central office administrators explained that the principals apparently had not given the teachers the necessary in-service training and classroom supervision needed to make the innovation work properly. The board of education explained that the administrators had for some reason not been able to deliver on their initial promises, despite the $50,000 extra for materials and paraprofessionals -- a generous allocation that had caused parents in other schools to question the board's lopsided generosity. Each group suggested that we would be wise to reach its conclusions in our report.

In the final report, we said a combination of factors -- some shortfall in performance by principals, central office administrators, and the board -- had caused the disappointing results. We recommended that they run the program full-scale for three more years and, not suprisingly, that they hire us again so that we could give them the real answer as to whether the innovation was good enough to extend to the other schools.

Example 8

In another state we had a contract to evaluate a large number of special education materials centers. When we first submitted a draft of the study questionnaire to our client, we got some helpful reactions. The review committee suggested to us that we eliminate some of the more negative items from the instrument; that we shorten the negative end of scales that ranged from strongly agree to strongly disagree or from very good to very bad; that we not name any service that was not already being rendered to teachers; and that we not administer the instrument to teachers who had not been receiving the services. The review committee made other helpful suggestions as to how we could improve our questionnaires so that our findings would be more useful in winning needed support for continuing the special education centers in the next year, which was their objective in having the evaluation made. We modified the questionnaire, of course -- we want to stay in business -- although we argued the committee out of some of the changes they wanted.

Later, when the findings were in, we telephoned the client to discuss the style in which the recommendations should be written . Should they be addressed to the local directors of the special education centers, to their advisory councils of classroom teachers, or to state officials responsible for the program? What was the target audience? We gave two or three sample recommendations written in several styles. They said the choice among the three styles was easy; they didn't want any of them. They said to eliminate all recommendations. The findings probably would not cause any trouble, but the recommendations certainly could. We complied.

Example 9

At one time we worked for a state education department on the redesign of teacher education. It was in part an evaluation study. The design called for us to hold a series of meetings with the major parties at interest in teacher education: deans of schools of education, professors, school superintendents, school principals, classroom teachers, state department of education personnel, and citizens. We held 125 meetings with them to discuss what flaws existed in teacher education and how they ought to be corrected.

At the outset, the client asked us to begin the study of teacher education in October and file a final report complete with new institutional accreditation standards by December of the same year. I objected that three months was a little speedy: the client wanted a high participation study involving over 50 colleges and over 500 school districts and the topic was extremely complex, not to mention political. Besides, there were the Thanksgiving and Christmas holidays. The client said that the decision-making timetable in that particular state required action by January in order to affect teacher education two years later. Besides, he was under some pressure from teachers' groups and citizens' groups to get things moving. So we said we would try to finish by December. We failed, of course. By December we had not produced a convergence of opinion among professors, teachers, school administrators, parents, and others on such questions as whether there should be performance-based standards for teacher education and certification. Issues like that take a little while to discuss.

When our client realized that we would not finish by December, he asked us at least to submit a progress report. So we drafted a 350-page (honestly!) progress report quoting verbatim from the minutes of the 125 meetings, taking care to represent all viewpoints, divergent as well as convergent. We dared not do anything except quote verbatim because we knew that otherwise the report would be rejected as inaccurate. When the participating groups received the progress report, they said two things: "This is way too long" and "You didn't include everything we said." So we wrote a second draft -- 396 pages. We submitted that one to our client, the state education department, which said, "This is way too long. Besides, where's the convergence you promised us when we gave you the contract in October?

While our client wrestled with the second draft, the participating groups pored over it. They not only confirmed their thinking; they expanded it. That gave us the problem of taking their January-March thinking and working it into the draft as though it had occurred in December. We reworked the December draft to accommodate the corrections and the expanded thinking of our participants. By May we were still working on the December progress report. We had yet to satisfy our client and our review groups that we had produced an accurate progress report that captured the essence of everyone's thinking up to December -- a progress report that would make the basis for further discussion in January, February, March, April, May and so on.

You won't be surprised to learn that around the beginning of May the client called: "Look, I said December. You're taking too long." At that point, he took over the raw data, wrote a draft of the final report, and published it -- doing something less than full justice to the promises he made to the participants about how their views would be used in shaping the redesign of teacher education.

But I had not been able to get universal agreement even on the December progress report. If my client didn't get a final report by May, he couldn't publish it in June; it couldn't go to the state board of education in September; the new regulations couldn't be put through public hearings in the fall; and the state legislature couldn't be notified in January that the new regulations would go into effect in September, 1976. So the client interrupted my orderly process. He took away the raw data. He wrote the final report.

Because I was advertised in the state for some months as Dr. Neutral from New York brought in as an honest broker between all the parties -- promising, among other things, to defend the participants against unfair handling of their ideas by the state education department -- my client still needed some kind of "final report" from me. We debated what it should say. I submitted a preface to his final report, saying that I worked on it from October through about March and had nothing to do with it after that. Following this disclaimer we spent considerable time discussing if I would later say what he wanted me to say. At the time of preparing this paper, these discussions were still going on.

Example 10

I once made a study of alternative ways of financing non-public schools. The Catholic schools in New England states were in considerable financial difficulty. A state legislative commission consisting of 25 members had been created to determine whether public funds should be used to help these schools, or whether they should be allowed to go under. Among other things, the commission wanted to know how much damage would be done to the public schools if the non-public schools collapsed and all their students suddenly transferred to public schools.

The commission was a cross-section of the state. Every viewpoint was represented. We had the advocates of Catholic schools and we had their opponents; we had the advocates of other private schools and their opponents; we had the parents who wanted financial aid and taxpayers who opposed it; we had public school people; we had the American Civil Liberties Union. Every voice had a place at the table.

With every politically significant interest represented, I found myself in the most neutral political environment I had ever worked in. The competing interests had to debate and come to terms with each other as to how the inquiry was to be made before the chairman could give me my marching orders. When I submitted plans for collecting data, turned in findings, or drafted recommendations, all of them had to be adjudicated among the commission members before the chairman could sign off on them. The effect of that, so far as I was concerned, was to neutralize various political factors and let me operate free of political considerations -- free in the special sense that the competing forces were adjudicated before they could reach me and work their separate and conflicting influences on me.

SUMMARY

Are there external political factors that influence the role and methodology of evaluation? You bet there are. And they are powerful.

Because the seeking, the winning, and the exercising of power are a prominent part of life within an institution as well as between institutions, internal evaluation staffs are just as subject to political influences as external evaluation staffs. Perhaps you have noticed that.

Sometimes political forces control the populations we can sample. Sometimes they limit the data we can gather. Sometimes they shape our instruments. Sometimes they influence the designs we can use. Sometimes they guide our interpretations. Sometimes they shape our recommendations. Sometimes they touch the wording of our reports. And they always influence the impact of what we recommend.

I think I have never written an evaluation report without being conscious of the fact that what I say will be used in the winning and the exercising of power, that my findings are going to be lined up on one side or the other of a contest that somebody else has already set up, and that jobs are on the line -- maybe my own job.

Once in a great while, I have had the privilege of sitting as a member -- a nameless member -- of a panel of judges and have been able to write a recommendation I thought the project director would never see. But much more often I have had to face him, his staff, his employer, and his funding agency and watch their faces as they hear, challenge, or attack my methodology, findings, conclusions, and recommendations.

Even if the subject of the evaluation is absent, I can never forget that the project monitor in the funding agency frequently identifies himself with the project and becomes its champion. So I have to think of the effect of my report on him, and on the larger program of which the project is a part, and on the agency sponsoring the program. Indeed, I even have to think about the overall fate and the future of research and development in education. I don't have to tell you that research, development and evaluation are themselves enterprises for which somebody has to win and exercise power in the legislative and political arenas in order to decide who gets what. I often find myself wondering whether my evaluation reports, even as they help the profession win small battles against unsatisfactory projects, simultaneously help it lose the war for research, development, and experimentation. But that is another matter.

Let me finish by giving some rules to escaping the influence of external political factors. Let me offer five such rules:

- Do not work for anyone who has anything to do with the project you are evaluating.

- Employ exactly the same objectivity and the detachment you would use in undertaking a research study where you pick the problem, where you set up hypotheses of your own choosing, where you gather data without external restrictions, and where you draw your own conclusions.

- Report your findings in such a way that they have no implications whatsoever for the project you are evaluating.

- Do not work for the government -- local, state, or federal -- and try not to work for philanthropic foundations.

- Be independently wealthy.

If you can follow these rules, you can escape the influence of external political factors on your work as an evaluator.

As for myself, I am not going to follow any one of these rules. My organization would go out of business as evaluators if we tried it. We are going to have to struggle along with a few other rules, much spongier ones, and try to make the best of a political world. Here they are:

- Try to understand how the client thinks. Find out what he has to gain or lose from the evaluation. He may have the gains in mind before he awards the contract, but he will think about nothing but the possible losses once the evaluator sets to work. One client said to me just the other day -- speaking, I thought for all of his breed -- "Studies just make trouble."

- Reassure the client at the outset that you can interpret the findings so as to give helpful suggestions for program improvement -- no matter what the findings of the study are.

- Find out what the powerful decision makers -- the client and those who surround him -- will actually use as criteria for judging the success of the project. Gather and present evidence addressed to these criteria. You may, if you wish, also gather data on the official objectives of the project or even on objectives that happen to interest you. But never try to substitute these for data addressed to crtieria the decision makers will use.

- Try to get a supervisory mechanism set up for the evaluation contract that contains a cross-section of all the powerful decision makers. Try to get it designed so that the members have to resolve the conflicts among themselves before giving you matching orders for the study or deciding whether to accept your final report.

- Write the report carefully, especially when describing shortcomings and placing blame, and do mention any extenuating circumstances. The client will appreciate that. Review the draft final report before submitting it to the client for his review, making sure in advance that you can defend any claim you make.

Following these rules will not help you escape political influences. The most they can do is help you cope with them.

FOOTNOTES

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STAGE 6

DISENGAGING FROM THE PROGRAM

- Planning program continuation
- Building district's linkage capacity
- Formalizing the end of the relationship

At some point the linking agent will leave the school district. Some linking agents are funded to work with a district for a specific period of time. Others must decide for themselves when and how to disengage. If the linking agent has worked with the district intensively or over a long period of time, disengagement can be a touchy process with all parties experiencing a number of feelings and needs. There may be a need to celebrate. There may be feelings of sadness about the separation. School district personnel may be straining to "go it alone" or may try to dissuade the linking agent from leaving. The linking agent too may be ready to leave or unwilling to let go. It is important to consciously plan and negotiate with districts for disengagement.

District staff members must not feel that they are being deserted or they may desert the innovation. Careful monitoring and planning enable the linking agent to determine when disengagement should take place. This section outlines some of the features that the linking agent should include in planning to disengage.

Planning program continuation

Once the evaluation results have been compiled and interpreted, the linking agent should meet with the district staff to discuss the continuation of the program. This discussion involves deciding what changes, if any, need to be made to improve the program's effectiveness, determining whether the program will be expanded to other classrooms or schools, considering additional staff training needs, and examining the budget implications for the next year.

After these initial decisions are made, the recommendations should be presented to the superintendent or other appropriate personnel for approval. When approval is received, plans should be made for continued implementation and integration of the program into the ongoing life of the district. At this time responsibility for the program is assumed by the principal or other district personnel if that has not been done earlier. The new program should no longer be thought of as an experiment. It is important to regard it as an integral part of the regular curriculum.

Many linking agents find it helpful to negotiate a gradual disengagement. The linking agent's role may change from a planning and monitoring one to an evaluating role. Gradually, the linking agent becomes an occasional advisor on major questions or problems that arise.

Building the districts' linkage capacity

The linking agent should use the disengagement process not only as an opportunity to ensure continuation of the new program, but also as a chance to reflect with the district personnel on the process they have used. Meetings can be held to debrief the program improvement effort, to discuss the skills and strategies used in the implementation, and to identify ways that district staff can repeat the process when considering another new program. This debriefing should involve making staff aware of the specific stages of program implementation, discussing what worked and what did not work, and identifying alternative methods of implementation. This process is helpful to the district staff in building their linkage capabilities and also helps the linking agent evaluate his or her work and apply the learnings to other settings.

Formalizing the end of the relationship

The linking agent should consider whether and when to bring the improvement effort to a formal close. Sometimes, when the adoption process is long and gradual, the linking agent's work will gracefully diminish. Sometimes, the linking agent will continue to have a relationship with the school or school district and will therefore remain "on call" indefinitely. In such cases it can be helpful to choose a time when the substantive work is done to sum up accomplishments. When the linking agent's relationship with the school district ends at a determined time (such as the end of a contract or a school year) or when the linking agent's presence on-site decreases dramatically, it is particularly important to declare a formal end to the relationship.

A written report can serve as a culmination of an improvement effort that has been important to the school or school district and has involved considerable staff time and energy. It can describe the work that has taken place and summarize the accomplishments, thus serving as both a history of one improvement effort and a blueprint for future ones. It can also include staff learnings and recommendations of future work.

Such a report can be presented to staff involved in the improvement effort, to administrators, and to school boards. Especially when coupled with oral presentations, the report can provide a vehicle for congratulating staff on their accomplishments, for bringing those accomplishments to the attention of superiors, and for mutual celebration.

Changing Urban Bureaucracies: How New Practices Become Routinized - summary

Robert K. Yin, Suzanne K. Quick,
Peter Bateman, and Ellen L. Marks

SUMMARY

Thinking About Routinization

New service practices continually emerge in urban bureaucracies. However, little is known about how such practices become routinized-i.e., how they become part of "standard practice." Ironically, many changes in service practice have continued to occur at a time when federal policymakers have become convinced of the intransigent and rigid nature of urban bureaucracies. The purpose of the present report has therefore been to describe the routinization process.

This process was studied by examining the life histories of six types of innovations:

Type of Innovation	Urban Service
Computer-assisted instruction (CAI)	Education
Police computer systems	Police
Mobile intensive care units (MICU)	Fire
Closed circuit television systems (CCTV)	Education
Breath testing for driver safety	Police
Jet-Axe (an explosive device)	Fire

The life histories were developed through case studies of the use of these innovations at 19 sites, but corroborating evidence was also collected with telephone interviews at 90 other sites. Our sample of life histories often extended over a period of 10 to 15 years. For this reason, a deliberate choice made in the study design was to identify and select a sample of "old" innovations, and then to trace life histories in a post hoc or historical manner. Although organizational memories may be difficult to tap, this procedure avoided the even greater uncertainties that can follow the tracing of "new" innovations forward in time.

The life histories were analyzed in terms of the achievement of ten specific organizational events, which have been conceptualized as either passages (transitions from one organizational state to another) or cycles (survival over periodic organizational events). The main contribution of this study has been to show how these events are critical to the life history of a specific, innovative practice. In particular, ten passages and cycles were found to be important:

- Equipment turnover (cycle)
- Transition to support by local funds (passage)
- Establishment of appropriate organizational status (passage)
- Establishment of stable arrangement for supply and maintenance (supply)
- Establishment of personal classifications or certification (passage)
- Changes in organizational governance (passage)
- Internalization of training program (passage)
- Promotion of personnel acquainted with the innovation (cycle)
- Turnover in key personnel (cycle)
- Attainment of widespread use (cycle)

The Incidence of Routinization

According to the findings, routinization occurs in a series of stages: the Improvisation Stage, the Expansion Stage, and the Disappearance Stage. During the latter two stages, the achievement of the ten passages and cycles serves as the operational criteria for routinization. However, the point at which a practice becomes "routinized" cannot be defined in any absolute sense. Instead of searching for an absolute definition, this study's approach has been to distinguish among three relative degrees of routinization-innovations that have become marginally, moderately, and highly routinized. These three degrees of routinization simply reflected the number (0-3; 4-6; and 7-10) of the ten passages and cycles that had been achieved by any given innovation.

On balance, it was found that a large percentage of the innovations had attained the status of being "highly routinized." In 8 out of 19 case studies (42.1 percent) and 31 out of 90 telephone sites (34.4 percent) this occurred; conversely, 21.1 percent of the case studies and only 20.0 percent of the telephone sites fell into the category of "marginal" routinization. These results are notable in two respects. First, they indicate that many innovations in these two samples-one a stratified sample (the case studies) deliberately chosen to create variation in routinization outcomes and the other a random sample (the telephone interviews)-have lasted and become a virtual part of standard practice. Such encouraging results mean that local agencies can innovate and may not be the bastions of "resistance to change" that they have been typically construed to be.

Second, the percentage of highly routinized innovations is much higher than that found in a recent study of federal innovations in education (Berman and McLaughlin, 1977 and 1978). That study found that none of the innovations had lasted longer than the period of initial federal funding, thereby leaving a much more pessimistic view of innovation. The apparent discrepancy in findings may have two rather simple explanations. First, the present study focused on technological innovations, whose hardware components were easier to trace than the organizational innovations that marked the Berman and McLaughlin study. The choice of technological innovations was deliberately made to facilitate the life history approach. Second, this study has also sampled from innovations that had not necessarily been initially supported by federal funds. In fact, about half of the innovations in the case studies were locally initiated and supported. From the local perspective, then, many innovations can be and have been adopted, implemented, and routinized. These simply may not be the innovations included on the agendas of federal agencies.

An initial question that followed the assembling of these routinization scores and ratings was whether there was a simple relationship between routinization and the chronological age of an innovation. The older innovations might have been the more routinized ones, and this alone might have accounted for the pattern of scores. In order to examine this proposition, the data were arrayed along two dimensions: the median age of all the innovations and the degree of routinization. For the case studies, the age of innovation made no difference in predicting the degree of routinization; for the telephone interviews, there was even a slight tendency in the opposite direction-i.e., the younger innovations tended to be more routinized. In sum, the degree of routinization was not related to the chronological age of the innovation.

The Conditions That Lead To Routinization

The major conditions that lead to an innovation to become routinized all appear to be internal to the specific local agency. This is not necessarily an unexpected outcome, but it does suggest that external initiatives (as in a federally initiated agenda) are either limited or will have to be designed with a greater degree of sophistication.

The specific internal conditions involve the role of an innovator (or innovator-team), who must develop agency support for the innovation and establish the appropriate skills and resources for initially operating it. Among the other important initial conditions, some group of agency practitioners must be trained to use the innovation and to begin using it as frequently as possible, preferably in relation to regular agency practices rather than as a special project.

Routinization is now likely to proceed further if the innovation becomes part of a core agency practice. One way of defining a core practice is if the innovation displaces an old practice. Under this definition, the new practice can be routinized more effectively if the capability for carrying out the old practice is systematically removed after the new practice has been installed. This dual tactic is often forgotten by those supporting an innovation, who rightly focus on installing new practices but who negligently fail to attend to the policies needed to terminate the old practices. Another way a core practice is established is when the innovation expands the agency's original array of services. Under this definition, the new practice can be routinized more effectively if the expanded array is formally recognized in a revised version of the agency's mandate. Thus, those supporting the innovation must work for changes in an agency's rules of governance, as reflected in a city ordinance, a bond issue's definition of the "standard" practices that may be financed, or even a perceptual shift reflected in a new agency name or reviews of the agency's budget.

Throughout its early life history, an innovation must continually gain increased support from agency practitioners. This support will result in part if the innovation covers a core practice. However, the innovation must also operate effectively. An effective operation must usually be proven in terms of the individual practitioner's own use of the innovation. Furthermore, some of the criteria by which the practitioner judges an innovation-e.g., convenience, reduced physical effort, additional sense of safety on the job, or elimination of distasteful tasks - are different from those typically held by external evaluators. Thus, for some innovations, external evaluators will not always predict correctly whether there are service payoffs. For other innovations, the role of the coordinator becomes critical. One of the major objectives of the coordinator is to identify specific applications and practitioner groups to which the innovation can be directed. Practitioner support may thus come from any number of subgroups in an agency but is still not likely to be based on the programmatic criteria-e.g., response time, lives saved, changes in student achievement-typically used by external evaluators. The main point is that there may be bureaucratic rather than service efficiency incentives at work, but little is known about the bureaucratic incentive system.

Finally, an important internal condition is the specific support of top agency administrators. These administrators are usually an essential part of the key decisions about an innovation-e.g., to adopt and undertake it, to make staff available through some ad hoc arrangement (e.g., overtime or special hours), or to make budgetary funds available each year. Without administrative support, most innovations will fail to become routinized (the main exceptions are innovations that may initially be adopted by individual practitioners at no cost to an agency). The administrators appear also to respond to bureaucratic incentives. If an innovation permits an expanded agency budget, for instance, the administrator may have a strong incentive for routinizing the innovation. However, again little is known about the bureaucratic incentive system of top administrators, especially given the confluence of actors-e.g., union representatives, staff from the municipal executive's office, and local legislators who are involved in determining agency policies.

In contrast to these internal conditions, external financial and technical assistance were consistently found to be unrelated to the degree of routinization. This does not mean, however, that local agencies can or will innovate as easily without such external assistance. More likely, the lack of relationship was due to the inability to distinguish between two different conditions-where local officials actively pursue external assistance and where such assistance is the result of initiatives by a federal granting agency or other external agent. External assistance may in fact be important to routinization if such assistance follows local initiatives and matches local needs and agendas.

In summary, several strategies were found to be effective in promoting routinization:

- At the outset, it was important to get the new practice operating on a daily basis, even if this was done by limiting its scope.
- The new practice had to have concrete benefits for service practitioners-e.g., convenience, reduced physical effort, greater potential for promotions, and additional sense of safety on the job. These types of benefits were not necessarily the same as those covered by external evaluators.
- If the new practice displaced an old one, specific steps needed to be taken to eliminate the old way of doing business - e.g., by eliminating the forms and procedures associated with the old way.
- The new practice had to be ultimately expanded to its fullest logical extent, or else it continued to be regarded as a "special project," which precluded it from becoming a standard practice.
- The time lags for achieving the various passages and cycles were different, so that it was important to get an early start on certain activities - e.g., establishing the personnel classifications for any new job skills that may be required by the new practice - to ensure later routinization.

Further Research

The findings of this study can be regarded as a possible source of new information for policy guidance. Other research-described in the final chapter of the report-will also have to be integrated to develop a firmer set of directives. Nevertheless, the study has suggested many steps that, if confirmed by further research, will allow local policy officials to assess and influence routinization.

For federal mission agencies, policy implementation will involve both the substantive steps directly related to routinization as well as improvements in federal program management. Regardless of the firmness of our knowlege about routinization, no routinization strategies can be pursued unless federal agencies are also prepared to more effectively organize themselves to synthesize the lessons from local experiences, to become more sophisticated in allocating and monitoring the use of federal funds, and to support further research on local organizations.

The problem of delivering neighborhood services to residents - i.e., ensuring public safety, increasing environmental safety, and providing adequate educational, public health, sanitation, and recreational services - has now become a problem for governments at all levels. It is impossible to return to the simplistic era when municipal governments alone could manage these services. Intergovernmental coordination has become a fact of life, but the design of effective policies can only be based on an improved understanding of how actual service practices emerge and become routinized.

Evaluation of Results and Disengagement - an excerpt

Edgar Schein, Warren Bennis,
and Richard Beckhard

As I have been repeating endlessly throughout this volume, the most important skill to be imparted to the client is the ability to diagnose and work on his own problems in the inter-personal, group, and organizational area. Initially the process consultant has more knowledge and skill than the client. As the P-C effort progresses, he should be able to observe an increase in the knowledge and skill of the various managers who have been involved. One of the best indicators of the growth of such skills is the willingness of various groups or teams to tackle process-analysis periods or agenda-review periods by themselves. How willing are they to assign an observer role, and how skillful are they in picking out key group events, in sharing feelings, in reviewing group action?

It should be clear that a willingness to engage in activities which initially have been the consultant's reflects a change in values. Even if a given manager were able to engage in more self-diagnostic processes, he might resist such an activity if none of the values cited above had changed. On the other hand, willingness reflecting a value change is not enough if there has not been a corresponding development of skill.

The assessment of the skill of the client system in diagnosing and working on its own problems must, as in the case of values, be made by observations on the part of the consultant and/or by the client system itself. It is important that managers feel confident in solving their own problems, and solving them effectively. Even if the consultant doubts that the level of skill reached is sufficient, he must be prepared to back off if members of the client system themselves feel they are able to go ahead without his help.

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In Case A, considerable value change and skill growth occurred over the course of the first year. During this time I spent a great deal of time in two major activities: (1) sitting in on various meetings of the top-management group; and (2) conducting interview and feedback surveys of various key groups, as managers decided they wanted such interviews done. In addition, there were periods of individual counseling, usually resulting from data revealed in the interview.

I have already given examples of the kinds of specific activities which occurred in the group meetings, interviews, and feedback sessions. It was clear that with increasing experience, the group was learning to tune in on its own internal processes (skill), was beginning to pay more attention to these and to give over more meeting time to analysis of interpersonal feelings and events (value change), and was able to manage its own agenda and do its diagnosis without my presence (skill). The group first discovered this from having to conduct some of its all-day meetings in my absence. Where such meetings used to be devoted entirely to work content, the group found that even in my absence they could discuss interpersonal process with profit. The members themselves described this change as one of "climate." The group felt more open and effective; members felt they could trust each other more; information was flowing more freely; less time was being wasted on oblique communications or political infighting.

During the second year, my involvement was considerably reduced, though I worked on some specific projects. The company had set up a committee to develop a management-development program. I was asked to sit in with this committee and help in the development of a program. After a number of meetings, it became clear to me that the kind of program the group needed was one in which the content was not too heavily predetermined. The problems of different managers were sufficiently different to require that a formula be found for discussing the whole range of problems. One of the reflections of the value change which had taken place in the managers was their recognition that they should be prime participants in any program which they might invent. If a program was not exciting or beneficial enough to warrant the committee's time, it could hardly be imposed on the rest of the organization.

We developed a model which involved a series of small-group meetings at each of which the group would set its own agenda. After every third meeting or so, a larger management group would be convened for a lecture and discussion period on some highly relevant topic. Once the first group (the committee plus others at the vice-president level) had completed six to eight meetings, each member of the original group would become the chairman for a group at the next lower level of the organization. These ten or so next-level groups would then meet for six to eight sessions around agenda items developed by themselves. In the meantime the lecture series would continue. After each series of meetings at a given organizational level, the model would be reassessed and either changed or continued at the next lower level with the previous members again becoming group chairmen.

My role in this whole enterprise was, first to help the group to invent the idea; second, to meet with the original group as a facilitator of the groups efforts to become productive; third, to serve as a resource on topics to be covered and lecturers to be used in the lecture series; and fourth, to appear as an occasional lecturer in the lecture series or as a source of input at a small-group meeting. As this procedure took form, my involvement was gradually reduced, though I still meet with the original committee to review the overall concept.

In recent months I have met occasionally with individual members of the original group and with the group as a whole. My function during these meetings is to be a sounding-board, to contribute points of view which might not be represented among the members, and to help the group assess its own level of functioning. I have been able to provide the group with some perspective on its own growth as a group because I could more easily see changes in values and skills. It has also been possible for the group to enlist my help with specific interpersonal problems. A measure of the growth of the group has been its ability to decide when and how to use my help, and to make those decisions validly from my point of view in terms of where I felt I could constructively help.

In Company B, my participation was similar, but for a variety of reasons changes in the organization have occurred much more slowly. The top-management group has accepted many of the values at an intellectual level but has not really committed itself to trying to make them work. Some members of the group have worked much harder at this than others. At the level of skill development, the group has experimented with a variety of techniques, such as having a member of the group be an observer and then report back. These activities have had a noticeable (though not a great) impact. Part of the problem in this company is that they have had to fight a number of traditions which are, in varying degrees, out of line with the kinds of values I have espoused. They have also faced a number of crises which required immediate action and which eroded efforts to concentrate on increasing diagnostic and interpersonal skills.

In recent months I have continued to meet both with individuals and with the group as a whole. My activities involve counseling members of the group and keeping a gentle but firm pressure on members of the system to become more open, trusting, and thereby, effective. Recently the group decided on its own to hold a two-day meeting at which some strong personal feelings were shared by members of the group. Though the experience was traumatic for one or two members, the feeling of most was that it had been constructive and they looked forward to more of the same at some later time. My role in the meantime is to help them to understand the emotional experience they have been through and show them how to turn it into a constructive experience.

In Company D, I found the key group to be from the start relatively high in its acceptance of organization-development values and in its level of skill. After a dozen or so meetings the group and I reviewed the project and decided that for the moment nothing more was needed. As problems developed, the group would resume contact with me. Some months later the group had to be expanded because the whole division which was involved was to be expanded. With the expansion came some potential new problems. Because the diagnostic skill of the group was already high, I was called in again to make some plans for a longer meeting at which some of the new problems would be explored in depth.

Process consultation is an emergent process and therefore it is difficult to put simple boundaries upon it. Similarly, it is difficult to give overall evaluations. One can look at gradual changes which occur in the culture of the client organization; one can look at the results of specific projects like an interview-feedback cycle; and one can assess the immediate impact of an intervention in a group. But one cannot measure specific indicators, however much this might be desirable. In the end, the outcome of a period of process consultation must be judged jointly by members of the client system and the consultant. Both must make a judgment of whether to continue the relationship and in what manner to continue it. If, in the judgment of either party, there should be a reduction of involvement, how is this process accomplished?

DISENGAGEMENT: REDUCING INVOLVEMENT WITH THE CLIENT SYSTEM

The process of disengagement has, in most of my experiences, been characterized by the following features:

1. reduced involvement is a mutually agreed upon decision rather than a unilateral decision by consultant or client;

2. involvement does not generally drop to zero but may continue at a very low level;

3. the door is always open from my point of view for further work with the client if the client desires it.

Let me comment upon each of these points, and give some examples.

1. Joint Decisions. In most of my consulting relationships there has come a time when either I felt that nothing more could be accomplished and/or some members of the client system felt the need to continue on their own. To facilitate a reduction of involvement, I usually check at intervals of several months to see whether the client feels that the pattern should remain as is or should be altered. In some cases where I have felt that a sufficient amount had been accomplished, I have found that the client did not feel the same way and wanted the relationship to continue on a day-a-week basis. In other cases, I have been confronted by the client, as in Company A, with the statement that my continued attendance in the operational group meetings was no longer desirable from his point of view. As a president put it, I was beginning to sound too much like a regular member to be of much use. I concurred in the decision and reduced my involvement to periodic all-day meetings of the group, though the initiative for inviting me remained entirely with the group. Had I not concurred, we would have negotiated until a mutually satisfactory arrangement had been agreed upon. I have sometimes been in the situation of arguing that I remain fully involved even when the client wanted to reduce involvement, and in many cases I was able to obtain the client's concurrence.

The negotiation which surrounds a reduction of involvement is in fact a good opportunity for the consultant to diagnose the state of the client system. The kinds of arguments which are brought up in support of continuing (or terminating) provide a solid basis for determining how much value and skill change has occurred. The reader may feel that since the client is paying for services, he certainly has the right to make unilateral decisions about whether or not to continue these services. My point would be that if the consultation process has even partially achieved its goals, there should arise sufficient trust between consultant and client to enable both to make the decision on rational grounds. Here again, it is important that the consultant not be economically dependent upon any one client, or his own diagnostic ability may become biased by his need to continue to earn fees.

2. Involvement Not Zero. If the client and consultant agree on a reduced involvement, it is important that both should

recognize that this does not necessarily mean a complete termination. In fact, a complete termination is not desirable because the diagnosis on which reduced involvement is based may not be accurate enough to warrant termination. A more desirable arrangement is to drop the level to perhaps a half-day every three or four weeks, or attendance only at certain kinds of special meetings, or an interview with key members of the client system once every two or three months. Through this mechanism it is possible for the client and the consultant to reassess periodically how things are going.

In Company B, there was a period where I felt that a plateau had been reached. At this point I suggested that I reduce my involvement to a half-day every other week, and even then only if specific individuals wanted to have some time to talk over problems with me. After a few months at this reduced level, a number of events made it more important than ever for the top management group to increase their level of effectiveness. The group decided to have more meetings and asked me to become reinvolved at an increased level. This decision was much easier to negotiate from a reduced involvement that it would have been from a situation where I had terminated the relationship completely.

In my relationship with Company F, there are long periods where I do not pay any visits, but it is understood that as problems or issues come up the client is free to call on me with the expectation that I will respond positively. The only problem with this kind of arrangement is that it makes it difficult for the consultant to plan his time. Obviously if several clients decide to increase their involvement all at the same time, it may be impossible for the consultant to respond. If this occurs, the consultant has to be open about his dilemma and determine from the various clients whether or not they can wait for a month or so. I have found from experience that I can carry about four clients at any given time, with two of them being more active (one half-day every week), while two others are "dormant" (an occasional visit every three weeks to a month).

3. Reinvolvement Is Always Possible. This point is closely related to the previous one, but I want to separate it to bring out a special aspect of the obligation of the process consultant. In any P-C consulting relationship with a client, I think the consultant should make it clear that the door is always open to further work once the relationship has begun. The reason for this obligation is that a good relationship with a consultant is difficult for a client to develop. Once both the consultant and the client have invested effort in building such a relationship it does not terminate psychologically even if there are prolonged

periods of lack of contact. I have had the experience with a number of clients of not seeing them for many months and yet being able to tune in on the group very quickly once contact has been reestablished.

As a general rule it should be the client who reestablishes contact, but I would not advocate sticking to this rigidly. I have, after some period of no contact, called a client and asked if I could talk with him to find out what was going on. In several cases such a call was welcomed and served as the basis for some additional counseling or process observation. The consultant must be careful not to violate his role by selling himself back to the client. It must be an honest inquiry which can comfortably be turned down by the client should he desire to do so. I have been turned down often enough to know that there is nothing inherent in the situation to force an artificial contact. Rather, it sometimes helps a client who wanted help anyway to ask for it in a face-saving way.

Terminating Ineffective Client Relationships - an excerpt

Chris Argyris

Little is known about the dynamics of terminating client relationships which are not effective. Few interventionists or clients wish to talk about termination experiences. Fewer yet are ready to have them studied. Here again is a crucial area in which empirical research is needed.

Free choice is a basic responsibility of the client and the interventionist. The latter has the professional obligation to consider termination when the relationship is not an effective one. The act of leaving a client system is a most difficult one to choose. However, if it is necessary, it should be used. If carried out effectively it helps to protect the clients as well as the interventionist. The choice to resign may also stimulate the clients to rethink their resistance and to unfreeze sufficiently to explore new avenues of inquiry and action. In other words, termination can be designed to be a positive intervention experience for both client and interventionist.

Criteria for Terminating a Relationship

The criteria for terminating a relationship are basically the same as those used to select the client system in the first place. As was pointed out earlier, the conditions necessary to achieve the primary tasks of valid information, free choice, and internal commitment require that the clients strive toward the following:

1. To own up to and be open with themselves and with the interventionist about all relevant issues.

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2. To show a spirit of inquiry and experimentation.
3. To take responsibility for their decisions; to make free and informed choices.
4. To perceive each other as the major human resources from which to draw upon and simultaneously to develop.
5. To formulate their diagnoses and their relationships in observed, descriptive categories with minimal evaluation, attribution, and contradictory information.
6. To identify the causal factors that they control rather than look for causal factors that are outside their control.

When these factors are used as criteria for leaving, the focus should be more on the clients' willingness and capability to explore, to learn, and to change and less on arbitrary levels of change that must occur by specified periods of time or by the number of interventionists' recommendations that have been accepted. As long as the clients are genuinely working on their problems, termination is not necessary.

When the clients refuse or are unable to be open, to accept responsibility for their behavior, to experiment, and to learn the interventionist must consider the alternative of leaving.

Terminating a relationship that seems to be proceeding unsuccessfully is not easy, especially when the clients wish to continue the relationships. The reader will recall that the clients' decision to invite a consultant into their system is not easy. Many see such an invitation as a possible indication of their weakness. Some may feel a degree of shame and guilt. Still others may dislike handing an important problem to an outsider.

Once the decision to invite the consultant into the system is made, forces are set in motion to integrate him into the group, to make it possible for him to operate effectively, and to generate genuine cooperation, expecially among those in the system who did not participate in the decision to invite the interventionist. The phase of convincing the lower levels of the need of the interventionist fits in perfectly with the upper levels' need to reduce the dissonance created by inviting an outsider. In winning acceptance for the interventionist, the upper levels may communicate several ideas to the lower levels: that the best man was hired; that it is important to get an unbiased view; that the System lacks competence; and others.

All the dissonance-reducing activities for the top and persuasive inducement activities of the lower levels tend to make a difficult situation for the interventionist to leave when he realizes that he does not believe he can be effective. The clients may have gone to great personal lengths to invite him, to integrate him into their system and to provide him with the cooperation that he wishes.

For his part, the interventionist has probably generated a high investment in getting himself accepted. He has probably behaved in ways which have suggested that he is enjoying the relationship; that he is learning; and that he appreciates the cooperation of the client system. The face-to-face confrontations which in all probability lead the clients to feel rejected and negatively evaluated are settings that most interventionists do not enjoy creating.

It is not unreasonable for the clients to interpret as an unfair rejection the attempt by the interventionist to terminate the relationship; to them it is a hostile act. Terminating the relationship may imply to the clients:

1. The interventionist sees their system as being unchangeable and hopelessly unable to make progress.
2. The interventionist is rejecting them as human beings. He may be suggesting that, as individuals, they are beyond his capacity to help them.
3. The interventionist is implying that he is a better individual than any of them and he does not find satisfaction in being related with them as individuals or with their system.

The implications are all negatively evaluative and can lead to client defensiveness. They may lead to a deep sense of defensiveness on the part of the clietns because the implications, if true, could confirm the clients' fear of themselves. It is not unusual for clients to question their individual and system effectiveness, to wonder if they are beyond help, and to feel a sense of inadequacy.

Moreover, if the termination comes after the interventionist has been "sold" to the system, his leaving could create anxieties among the lower levels. If the outsider, who is described as excellent and necessary, leaves, what does this imply about the effectiveness of the client system?

The interventionist strives to be aware of these questions in the client's mind and to bring them to the surface. In so doing, he may focus first on his own impact on the system and his inability to be effective, given the client system's behavior. The objective is to help the client see clearly why the interventionist feels ineffective. Such insight could lead the client to alter his behavior, lead the interventionist to alter his behavior, or lead the client to select a new interventionist. The exploraton of the latter alternative is important because each client system has its own life style and not every interventionist can be effective within this style.

The strategy of the interventionist exploring first his responsibility for the probable failure seems correct for several reasons. The interventionist should be better trained, should have more experience, and should feel a greater responsibility for exploring his effectiveness. If the exploration goes well, it helps the clients learn a model that may be useful to them when their turn comes.

Briefly, the model calls for the interventionist to present all the data of which he is aware that leads him to consider termination. He strives to communicate this information in such a way that it can be directly verifiable and will minimize evaluative and attributive statements. The interventionist also strives to help the clients be critical (if they feel so) of the interventionist's philosophy and style. The clients may indeed be dissatisfied with the interventionist. If they express their dissatisfaction, they help to illustrate the frustrations that the interventionist experiences and predicts that the clients may also be experiencing.

Several alternatives are possible. The interventionist's style may be incongruent with the client system, yet the client system may be capable of effective change; or the interventionist's style may be incongruent with the client system and the client system may not be capable of effective change.

The interventionist should first focus on the incongruency and on the difficulties that it causes him. As the clients explore their difficulties with the interventionists, they will generate data about the type of relationship they prefer with an interventionist. Once they are clear about their preferences, they can explore the possibilities of working with the present interventionist, of finding one more congruent with their system, or of determining if their preferences would tend to lead to effective change.

The objective is to create a dialogue between the client and the interventionist that helps both become clearer about their dissatisfaction with each other's behavior and the changes they would wish to make in order to create an effective relationship. Such information could help the clients decide more effectively if they wish to continue the program, if they want the present interventionist, or if they do not wish him, to define the qualities they would require of the next interventionist. The present interventionist should help them in these deliberations.

The point bears repeating that the interventionist finally considers rejecting a client system not because of any fault of theirs but because of his inability to deal with them.

Admittedly, clients may not experience the strategy as the interventionist intends. They may focus on the negative evaluation that it implies to them. The clients may feel that if he cannot help them, they are really in trouble. This conclusion may be valid but it is one for which they must accept responsibility. Once having accepted responsibility for their behavior they may be free to choose the next steps they wish to take.

Case 1

In case 1 that follows, the interventionist attempted to create such a dialogue. Over a period of a year he had arrived at a tentative conclusion that he could not be effective as long as the vice-president of organizational development (VP) refused to permit him to deal directly with the other officers. He communicated this opinion several times during the year. The VP persisted in his position. The interventionist continued the relationship, as defined by the VP, for several months. His purpose was to generate valid information to test his requirements. Several episodes occurred in which he was unable to be of much help to the client system because of his lack of contact with the other officers. One day he asked for a meeting of the client system to discuss termination.

The client system was comprised of a vice-president in charge of organizational development and all the top change agents in the firm. The purpose of the interventionist's relationship to the client system was to help the system establish an effective organizational development program within the total organization and to help the change agents in their own development.

The vice-president (VP), as mentioned, preferred to keep the interventionist from having face-to-face contact with the key line officers. The interventionist had intimate contact with one senior vice-president before VP came to the organization.

Indeed, it was the interventionist who brought the company's attention to VP, and it was the senior vice-president who helped to persuade the other line officers to hire the vice-president for organizational development (VP).

As time passes, the interventionist became aware that the VP's style of intervention was based primarily on nondirective therapy. He would make himself available to help facilitate personal growth and interpersonal relations among line officers, but he preferred not to take the initiative in developing action strategies to help the line officers examine the impact they were having on each other or with the system below them. For example, a systematic study was done by an outside consultant identifying some important human problems within the largest division of the organization. During the feedback session to the top management of that division, many divisional executives urged that the analysis and data be presented to the top officers of the entire company because they felt the data were applicable beyond their own division. Even though the senior officer agreed, the vice-president never took the initiative. In another instance, the interventionist had developed an analysis defining the conditions under which the employees would become dissatisfied. These conditions actually developed and the employees reacted as predicted. Again the opportunity was offered to the vice-president to bring the top line officers together to explore this analysis, and again he decided against doing so.

The vice-president continued to use the interventionist to advise him in dealing with the top line executives. The interventionist kept pointing out that it was difficult to provide advice about a client system which he had not met directly. He was expecially concerned that he would not be used effectively if he were limited to providing help based upon the vice-president's diagnoses of the situation. The interventionist insisted that an outside resource person was helpful in evaluating the situation directly and with a different point of view. The vice-president agreed but never took any action to bring the interventionist and the other officers together.

Another problem arose because the other (more junior) change agents tended to agree with the interventionist. They wished that the vice-president would take more initiative in creating learning situations for the executives. As time passed, they heard rumors that the top line officers felt the vice-president was not taking enough initiative. They feared that the vice-president would eventually lose his influence with the officers, which meant that they would be left with an uninfluential superior.

After one year of repeated warnings and confrontations with the vice-president (privately and with the other's change agents), the interventionist decided to terminate the relationship with the vice-president. Although he was willing to continue with the other change agents, he wondered if he should be helping them because he would help reinforce their style which was more active than the vice-president's style. The change agents would then run the risk of developing a style that was more confronting than their superiors'. If they ever got into difficulties within their respective divisions and if their vice-president contacted VP, the latter might not support them.

The interventionist asked for a meeting with the entire client system in order to discuss the tentative decision.

In the protocol that follows, we note that the interventionist began the meeting by describing the vice-president's style and the consequences it had had on the interventionist--he felt underused and misused. The interventionist pointed out that he respected the vice-president's right to his personal style and expected the same respect from the vice-president and the others of his style. He also identified the increasing frustration that the change agents had reported about the vice-president's nondirective style. (This had been discussed openly in several team-building sessions months before this meeting.) Finally, the interventionist pointed out that if the vice-president ever invited the interventionist to meet with the line officers and they liked his style, they might question the vice-president's style even more strongly. The first objective was to describe the present dilemmas and possible future dilemmas in the relaionship.

It is important to note that the interventionist attempted to provide directly verifiable data when he described the vice-president's style; he helped to prevent the group from having to polarize between the interventionist and the vice-president; he encouraged individuals to express feelings of anger or rejection; and above all, he listened carefully to all attempts to help him uncover new data that might make him reverse his de- cision. When no new data were generated, and the group agreed, he formally terminated most of the relationship, leaving open the possibility that he might return if wanted and if conditions were more facilitative for his style. Finally, he helped the clients plan ahead, even to hiring new interventionists. The relationship with the other change agents continued positively, The interventionist was invited back several times to help them with some of their problems.

Interventionist: During the last months, I have read some of the transcripts. I now feel I have a problem, primarily with VP, but it's so interrelated with this group that I told VP I'd rather talk about it with the total group. He agreed. I'd like to tell you my problem and get either confirmation or disconfirmation. Also, we may explore together some possible consequences or our agreed diagnoses.

The interventionist describes VP's style.

The way I see VP's strategy of unfreezing an organization is to let the interest evolve as much as possible from the clients who, in this case, are the officers of the company. Unless they take the initiative and ask for some help, VP will not intervene even to design a learning situation or to bring a dilemma to their attention.

The interventionist describes the differences between his and VP's styles.

VP's strategy is different from mine. His strategy creates a bind for me. VP rarely uses the naturally occurring situations to confront the officers with their behavior. For example, I think he rarely provides information to the officers when they are floundering or cancelling each other out during a meeting. Rarely has he helped them explore the aspects that, at this point, they might think are unexplorable. For example, I thought the union situation was a natural situation for leverage. Could not this be an ideal opportunity to ask the officers to look at their human organizations? It could have been introduced to them as informing them of something that was happening in the company. Finally, I thought the top executive development steering group, which VP created himself, was another opportunity for him to engineer opportunities for exploration. VP's style is encouraging; he waits patiently, ready to jump when he is asked.

He discusses the consequences on the interventionists and on the line officers.

For me, the consequences of this action in a world like company X are important. Most officers live in a world in which success comes by blocking out information, by minimizing the demands made on them, and by hoping that their peers will give them the information they need as officers. In this world, I think VP's style is going to be frustrating to the officers, and eventually to VP. They are not going to go to VP and say, "Help us." They will probably deal with their frustration by perceiving VP as either too passive, or incompetent, or frightened. In the early stages they might say he's new and hasn't gone very far.

I think there's also a consequence on this group of OD (organizational development) men. Many of you are more ready and comfortable to confront the organization than is VP. You are more comfortable in confronting because you get a lot of data from all levels saying, "Let's do something about executive development."

<ins>He discusses the consequences of VP's style on the change agents</ins>.

As another frustration, you may feel that VP is becoming increasingly distant from the officers in the sense of being able to unfreeze top level systems. In effect, VP's strategy is to say the officer group should be reached by VP and not an outsider unless he's invited in. This strategy is different from the one to which I am accustomed. For example, in one large organization, the president has asked me to come in. I said that if I did I should like to be hired also by the total top officer group. He said, "Well, that's the only way we operate." VP's equivalent in that company set up a two-day meeting at which I came to know them and they came to know me. If they wanted me, fine; if they didn't, that was all right.

Here I feel a great distance from the officers and I am unable to help VP and this group as much as I'd like because the organization is unknown to me, with the exception of one division. I came into this division through the top line officer. In this group, when someone talks about the officers and their problems. I cannot be helpful because I do not know them. All I can do is depend on your description, and that is the worst position for a consultant--to depend on the description of his client. Consequently I feel tied to your perception.

I also feel that VP's strategy means that the only way I can earn my respect with the officers is through VP's behavior. If I'm going to earn respect from anybody, I want to earn it directly and not through VP. At this point, I feel little ability to influence or to be in dialogue with any of the officers other than Mr. A. I also feel unable to give the kind of help I'd like to give, expecially when VP raises questions about the officers and the group. I feel handicapped because I don't know the group about which he is talking.

He discusses the consequences if the interventionist met the line officers and they liked him.

I also wonder about another problem. If I met some of the officers and they liked my style of intervention and became enthusiastic about me, they might be led to respect VP much less. They will tend to see VP's style as passive. This could create even further problems for VP.

A third problem may be illustrated by B, whose OD style is closer to mine. Mr. B. might manage to design a few confronting sessions with his boss, Mr. O. Let us say that he succeeds and influences his boss to start some OD programs. It would be natural for Mr. O, an officer, to check with VP. VP, I would predict, would be supportive of anything Mr. O and B are sure of. However, it would be possible and natural for VP to say that the program may be too fast for him. Can this group of OD men be as effective as they would like unless they know that, in moments of decision, they would have more active confrontation by VP's of the officers' group? I would like to stop here and find out if this makes sense to anybody and then perhaps talk about some alternatives.

VP maintains that he is master of his own career and the interventionist cannot harm him.

VP: I can react to two of these points. One is about your possible harming me. Others might share the feelings, I don't think you can hurt me because my own life course has become sufficiently set in the last couple of years so that I am not going to stay here unless we can do some real and meaningful work in this company.

I've already made this decision so I don't think you could hurt me in that respect. The other thing I'd comment on is the fact that the genuine discord and unsettled condition of our organization is now beginning to move into clearer focus and although we by no means see the solution of all the problems, we do see four or five big blocks falling into position.

B: (to interventionist) Are you saying you want to get out?

Interventionist: I guess that's one of the consequences. I don't see it as the only consequence. I think I know more clearly what I want from myself and from VP than what I want from the rest of the group. I really don't see what kind of help I can give him. The only evidence I have is what I have given him up to now. It has been support in the form of ideas. VP's response generally has been "That's a great point; I'm going to work on it." Yet now, a year later, nothing has been done about any of the points.

C: What worries me is the assumption B is not going to change and VP is not going to change in this process.

Interventionist: I see B as learning and changing, but I don't see VP as changing. I don't think VP wants to change.

D: I hate to speak of this now because I think it's evading the issue, but I see VP changing, as far as my experience with him is concerned. I feel there's no question that this organization (OD group) is changing, and that it started to change as a result of our last meeting.

I think I understand how you feel. I'm surprised you didn't say it sooner. I think everybody's patience has been tested and I don't mean to direct that comment just to VP. We've made a lot of blunders around here. I did my own share of it. What is counseling? What is counseling and OD? Where am I? But I feel that now this group has found itself. I'd like to see you stay long enough to test whether or not your assumptions are correct.

The client tests to see if the interventionist's leaving is negotiable.

C: I guess I don't fear the possible conflict between ourselves and VP and the rest of the organization. I think it's going to happen without you. It's going to come if some of these problems of organization are not solved. Is your leaving a negotiable question?

Interventionist: Yes, it is; if it weren't negotiable, I wouldn't have brought it up. It is genuinely negotiable. At the moment, I believe I cannot be effective; and if I were, I might harm VP. Therefore, I think I should leave. However, I am open to checking the diagnoses, as well as the suggested courses of action.

The interventionist accepts an evaluation of VP as being his perception, but not VP's.

E: As I see it, you perceive that there is little possibility of change on VP's part and, therefore, you would be wasting your time.

Interventionist: Yes, this is an issue. Mind you, I don't think VP sees himself as wasting his time. I think VP feels he knows what he's trying to do. He also is aware of our differences in style. I remember a more recent example when VP said, "Well, looking back on it, I'm even more sure that my action was correct. I know this is different from what you would do, but this is my way and I've got to do it my way." I think he's absolutely right. He has to make his own choices.

C: I've been in a couple of meetings with VP, one just this afternoon, and there's been quite a bit of thinking on what we talked about this afternoon. I was going to say roughly what you said, but hear me out. Conditions being what they are in the whole corporation, in addition to VP, I find myself in a dilemma; I want to learn more and become a better change agent. I'm going to be able to do that in this company. If, however, I want to take the skills I have learned and try changing this organization, I can't do it. And I don't think I can learn here.

B: Can't you do it right now... quickly?

C: Yes, to me staying and learning depends on the resource people who teach me--I see you doing it.

Interventionist: I feel the way you do. If pulling out is the alternative, I don't think it means pulling out from both kinds of sessions. It may well be that we can still meet periodically. I would rather see the meetings focus on professional issues.

VP: You said it was within my strategy. It certainly was not in my strategy to start fire below and build a scheme.

Interventionist: You are doing it by putting B in as a change agent. He is not going to sit around. That's what I meant by "below."

VP: I was reacting to the fact that I didn't understand you; you said my strategy is to go around and light fires underneath.

Interventionist: I meant it in this sense: you are willing to find good men, give them training, and turn them loose; if they work well they will begin to change the organization. And I think they will. That's my concern. I now want to know what happens when they start changing to the point where the officers get threatened.

VP: This brings up back to your point and that is, am I adequate to deal with it at the officer level?

Interventionist: Yes and no; I will put it another way. I think you have a strategy that is congruent with you, and if you're given a chance to use that strategy, it will be adequate; that's no problem. The question is, will you be given a chance to use the strategy? Your strategy fits beautifully if you are a president or a therapist or a consultant and the clients come to you. If, as president, you have power, and a subordinate initiates action, you are supportive and helpful. That reaction from a president is great. A subordinate wants it in order to grow. But as vice-president of organizational development, you don't have the officers coming to you.

Note that VP agrees with the interventionists's description of his style.

VP: Ah, this is what I meant, is my style adequate to the situation that is going to evolve if B starts things happening? That is the issue you're raising. Well I find your description of my style accurate according to what I believe and know. I think my style stayed with me when I left the other company. I was told that I had been 100% successful in the counseling sense. I had listened, understood, supported, and been congruent up to this point. When it came to the point of being confronting in the office of the president--on my own behalf, in terms of my own needs--I was insufficiently confronting. There were consequences of this limitation which prevailed in my experience. I was told I would have difficulty in acquiring a staff position because, traditionally, staff men and personnel men are pushed aside and frustrated by line men.

The objective of my--or our--role is to be consultative to the organization, to help and to solve problems. This position calls upon different skills, different behavior, different strategy than the one I had been experiencing. You agreed when we talked about it. So I'm just reinforcing from my experience your description of my style. Now the issue is, can I change my style? Mr. A assumes I can't. Well, I don't know if I can or not. I think I will continue to be congruent--I will always try to be congruent within myself. I think I am incongruent with my situation at the moment. I have been somewhat incongruent with my situation since I came here. I'm sorry you're pessimistic, but maybe your're right; I don't know. I won't give up; though I'm willing to try to understand better how to be a staff man rather than a line man, and how to be confronting when it's not my normal way. If that attitude is valid or useful or necessary to my success and the group's success, I'm willing to examine it.

Interventionist: Is is a year and a half since you came here?

C: Almost a year and three-quarters.

Interventionist: To my knowledge, you have never been confronting.

VP: Well, no, I have never consistently been confronting.

Interventionist: You have never asked me or anybody else in this room how we could help you to become more confronting.

VP tries to convince the interventionist that he and the situation will change.

VP: It's different now from the last time we all met, so I'd at least like the chance to examine this matter of confrontation--how you should do it, when you should to it. I talked months and months ago about inviting consultant Z and having a workshop; confrontation was one of the things I hoped to talk about. We've never been able to have that workshop because we've never been able to get the group formed. I'm giving a partial explanation for not having said that one of my problems is understanding how to be more confronting and how to be a vice-president rather than a president. Maybe I've never said it before, but I'm saying it now. If you feel you've got to leave us, I'm still committed and I'm still interested in those questions.

The interventionist describes the doubts by citing directly verifiable events.

Interventionist: In three different situations, we jointly planned ways in which you could have confronted the officers. In all cases, you seemed enthusiastic about moving forward, but in none of the cases did you do anything about it.

VP: Well, I'm pushed a little for time now because...The company has had many here-and-now system problems which have been taking up a lot of my time. I have been pressed by a number of other urgent things. I think you oversimplify the environment at the moment.

The interventionist accepts VP's right to have his style, but points out his right to maintain his own style and effectiveness.

Interventionist: What you are saying makes sense to me. Until the environment can be such that you can develop some commitment for OD, I'm not a very useful person in terms of using the maximum amount of resources that I have.

VP: I'm at a point where I have to depend on everyone else to help. I don't like to hear you say that you dont't expect to see me change. Maybe I don't quite understand...

Interventionist: I'm saying that your behavior here this year is not much different from your behavior last year. Your behavior is genuine client-centered behavior. I don't think anyone will accuse you of not being genuine. You'd rather not act than be nongenuine. I value this in you. We are alike in that dimension. All I am saying is that I don't see your genuineness as a valid strategy for this particular situation. I would wish for another more consciously planned strategy.

VP confirms the interventionist's diagnosis of VP's strategy.

VP: Let me respond. I think you understand my strategy and describe it accurately. But I didn't learn it all in ten minutes. I learned it over twenty years and I did change between the first year and now. I have changed a great deal in the last five years. I have attempted in these last few years to be responsive to all kinds of things--the balance sheet, the budget, and the organization. I have worked to become what you once called "reality centered." So I am saying I don't think I have stopped changing or learning. But that doesn't matter. The important point is your feeling that my style to date may be incongruent with the situation that I am in. That may be true. If it is true, your comment is significant to this group, to me, and to the company.

The interventionist does not condemn VP; he simply asks for a similar opportunity to be congruent.

The interventionist recapitulates and maintains that this session tended to support his idea to leave.

Interventionist: If you do, indeed, move in the direction of becoming more active and do more planning, you can depend on me. But I'm not very helpful with your style at the moment. When I look at my role in your sessions, it is primarily one of being a clarifier. You are inducing me to be like you. Like you, I want to be congruent. I'll tell you where I am right now. I began this evening stating my position. I felt the initial reaction was, "Don't worry, you can't hurt us. We want you to stay," and so on. The more the group talked, the more I felt my diagnosis of the situation was being confirmed; so I wind up this evening with a sense of confirmation rather than disconfirmation about the major points. I've been as clear as I can be about the condition under which I can be of help, and I'd like to say that if those conditions ever begin to become approximated I'd like to come back, if you still want me. A second issue: if this group wants to work on change agent issues, I am still available. I don't want to stop that unless the group wants to. I may have to say I can't do it as often as I did; but I am saying, if I come back with you or with the officers, I'd like it to be more on the terms that I can be helpful and useful with the skills that I have. Until then, if you call up and say, "I'm in trouble; I need some help." I'm not going to say, "I'm sorry." I still want to help. Am I answering your question?

But he also commits himself to return if the clients are in trouble.

B: I think our discussions have dealt with the ethics of the consulting relationship. The consultant has certain values and expectations in working with an organization but they are not quite the same as those needed in being the consultant to an individual. They want action. They want to move quickly. I wonder if our inability...

VP: I asked the question initially for this very reason. I hope the interventionist won't abandon us for long. We need to have another meeting to discuss the question because we've been talking about his relationship with me. I'm not sure he's going to abandon us as a group. But if there's going to be some trauma among us, I think we ought to talk some more about it.

B: I guess I'm confused, conflicted, threatened, angry...

The interventionist attempts to encourage people to express any

Interventionist: Angered at me?

B: It's somewhat diluted; I don't feel particularly angry at you.

aggression they may have toward him.

VP: Angry at me?

B describes his dependence on the interventionist as a source of his anger.

B: Well, it's kind of general anger. Quite frankly, I've used the interventionists' name a number of times in the last two and a half weeks. Whenever I feel incompetent in dealing with something, I say there's always him; he can bail us out, or at least can help bail me out so I can be of some help. We have this confidence behind us which seems to help a lot in dealing with some of the managers. I caught myself a little while ago wondering if am I going to use that ruse now or if I should pick another name out of the book.

The interventionist points out that leaving is not easy for him; that he is willing to return if needed and if conditions are right, but he feels at the moment that he should leave.

Interventionist: Let me say two things. One, it's not easy for me to leave. I could have written a nice letter and not faced the issue openly, but I can't do that to the people with whom I've developed a relationship that I really value. The other one, I didn't want to write a letter because I didn't want to break the relationship. I'm not trying to leave the company for good. I am trying to say there are conditions under which I would come back. The conditions would have an influence at the upper level of the organization.

D: Could the conditions which might encourage you to stay be discussed this evening?

Interventionist: The conditions are those I just mentioned. I don't have anything up my sleeve.

The meeting ended with a discussion of other interventionists that might be hired and further meetings for team building. Six months later, VP left the company because neither he nor the officers felt that he could use his abilities effectively in this situation.